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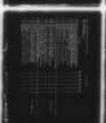
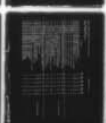
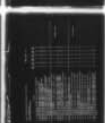
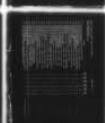
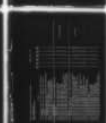
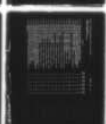
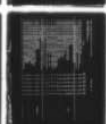
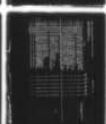
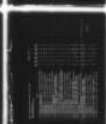
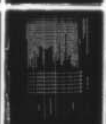
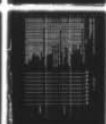
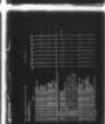
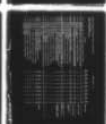
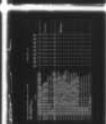
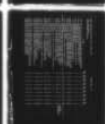
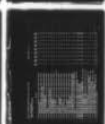
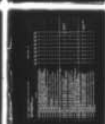
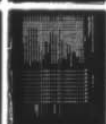
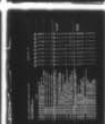
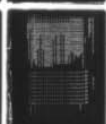
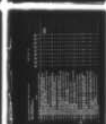
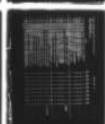
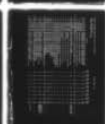
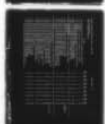
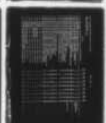
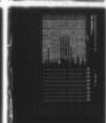
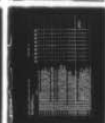
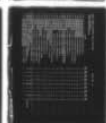
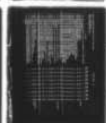
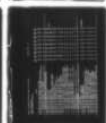
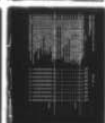
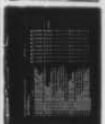
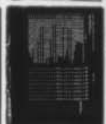
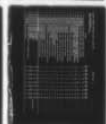
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OCCUPATIONAL SURVEY REPORT

May - Jul 76.

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ELECTRONICS PRINCIPLES OCCUPATIONAL SURVEY REPORT

MISSILE MAINTENANCE CAREER LADDER

AFSCs 31631L, 31651L, 31671L, AND 31790.

AFPT-90-316-222

5 NOVEMBER 1976

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PREFACE

This report presents a summary of the results of a detailed Air Force Electronics Principles survey of the Missile Maintenance career ladder, AFSCs 31631L, 31651L, 31671L, and 31790.

The Electronics Principles Inventory (EPI) was developed by Major Thomas J. O'Connor and Mr. Hendrick W. Ruck and the survey data were analyzed by Major O'Connor and Mr. Guy B. Cole. All are members of the Occupational Survey Branch, USAF Occupational Measurement Center, Lackland AFB, Texas.

Computer programs for analyzing the occupational data were designed by Dr. Raymond E. Christal, Occupational and Manpower Research Division, Air Force Human Resources Laboratory (AFHRL), and were written by the Project Analysis and Programming Branch, Computational Sciences Division, AFHRL.

Distribution of this report is made upon request to the USAF Occupational Measurement Center, attention of the Chief, Occupational Survey Branch (OMY), Lackland AFB, Texas 78236.

This report has been reviewed and is approved.

JAMES A. TURNER, JR., Colonel, USAF
Commander
USAF Occupational Measurement Center

WALTER E. DRISKILL, Ph.D.
Chief, Occupational Survey Branch
USAF Occupational Measurement Center

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ELECTRONICS PRINCIPLES OCCUPATIONAL SURVEY REPORT
MISSILE SYSTEMS MAINTENANCE CAREER LADDER
AFSCs 31631L, 31651L, 31671L AND 31790

INTRODUCTION

↳ This report summarizes the results of the administration of the Electronics Principles survey to Missile Systems Maintenance personnel in the L shred who perform maintenance on air-to-air and air-to-ground missiles. This survey was administered during May, June, and July 1976.

↳ This report describes: (1) development and administration of the survey instrument; (2) summaries of background information which reflect the population of the survey sample, the kinds of equipment maintained or used in their work, and some general attitudes and/or observations about their job; and (3) electronics principles used by personnel at various points in their career progression or time in service. ↗

DEVELOPMENT OF THE ELECTRONICS PRINCIPLES INVENTORY

Creation of the EPI required a lengthy process of development and review. A chronological description of the process will not be undertaken in this report; however, the highlights of the process will be presented.

Personnel from the Occupational Survey Branch working on the project were well qualified in theoretical physics and electronics as well as having expertise in task analysis and survey development. Electronics experts from the five ATC training centers, who averaged 12 years of maintenance experience and four years of electronics principles instruction experience, spent several weeks working on the development of the EPI. Over 300 maintenance personnel from SAC, TAC, ADC, MAC, and AFCS participated in the development of the inventory.

In addition, personnel at the Electrical Engineering Department of the USAF Academy and at the Air Force Human Resources Laboratory reviewed and critiqued the EPI during its development.

The EPI used in the 316X1L survey contained 1,257 specific items grouped under 62 electronics subject areas, covering all electronics principles training given at the five ATC technical training centers.

ADMINISTRATION

The inventory was administered by members of the Occupational Measurement Center during visits to the missile maintenance organizations at seven bases during May and June 1976. In addition, inventories were sent to the NCOIC of Missile Maintenance at Tyndall AFB, who administered the inventory and returned the booklets in July 1976. After supplying identification and biographical information, incumbents answered the questions "Yes" or "No" depending on how the question related to their present job.

Table 1 reflects the distribution of assigned personnel in the career ladder as of 30 April 1976 and the percentage sampled in this survey. The sample represented 16 percent of the total Air Force assigned strength of 316X1L personnel and was selected from representative CONUS bases to provide, as nearly as possible, a representation of the career ladder in terms of missiles maintained and types of aircraft associated with these missiles. Table 2 contains a list of the aircraft, missiles, and bases included in this survey.

SUMMARY OF BACKGROUND INFORMATION

Assignment To Career Ladder

Table 3 shows that 85 percent of the respondents had completed resident technical training prior to being assigned to the 316X1L career ladder.

Job Satisfaction

As shown in Table 4, less than one third of the respondents to the survey reported that their job was interesting. This was extremely low when compared to responses from 35 career ladders surveyed in 1975 in which 69 percent of the respondents reported that their jobs were interesting. Comparison of first enlistment groups from the two commands represented showed little difference in job interest, with a larger percent of the ADC personnel reporting their job as so-so while the largest percentage of TAC personnel felt that their jobs were dull.

Table 5 shows that over 60 percent of the personnel surveyed felt that their talents and training were used very little or not at all in their job. This feeling correlates well with the small number of items of electronics principles which respondents reported that they used in their jobs. The large number of personnel reporting low utilization of talents and training is significant when compared to the 1975 survey results in which an average of only 26 percent of the respondents to 35 surveys felt that their talents and training were used little or not at all.

Table 6 reflects reenlistment intentions as projected by respondents to the survey. Table 7 reflects actual reenlistments for FY 76. Note that although the average reenlistments for all groups was 47 percent, the rate for first term airmen was less than 28 percent.

Equipment Used

Tables 8, 9, and 10 list equipment used by 20 percent or more of the respondents to the survey. It should be noted that although responses to these background items indicate only that incumbents use this equipment, neither the frequency of use or purpose for which the equipment is used is specified. Therefore, interpretation of these data must be carefully evaluated in conjunction with performance data as shown in the Appendix.

TABLE 1
316X1L COMMAND REPRESENTATION

COMMAND	CONUS		OVERSEAS		NUMBER SURVEYED
	NUMBER ASSIGNED*	NUMBER SURVEYED	NUMBER ASSIGNED*	NUMBER SURVEYED	
ADC	115	41	AAC	26	-
ATC	75	1	ADO	7	-
LOG	6	-	AFE	254	-
SAC	3	-	ATO	6	-
SYS	23	-	HQN	2	-
TAC	586	160	PAF	78	-
			PAS	83	-
TOTAL	808	202	TOTAL	456	-

TOTAL ASSIGNED = 1,264

PERCENT OF TOTAL ASSIGNED SURVEYED = 16%

* Based on Airmen Manning Document (AF 316X1L PMC-P657) as of 30 April 1976

TABLE 2

AIRCRAFT, MISSILES, AND BASES INCLUDED IN THE SURVEY

AIRCRAFT - F-15, F-4, F-111, F-106, F-105, A-7

MISSILES - AIM 4 SERIES, AIM 7 SERIES, AIM 9 SERIES, AGM 45,
AGM 65 SERIES, AGM 78, TGM, KMU SERIES

BASES - LUKE, MACDILL, CANNON, NELLIS, CASTLE, GEORGE,
DAVIS-MONTHAN, TYNDALL

TABLE 3

METHOD OF ASSIGNMENT TO CAREER LADDER

	<u>PERCENT ASSIGNED</u>
COMPLETED RESIDENT TECHNICAL TRAINING	85
RETRAINED OR CONVERTED FROM ANOTHER SPECIALTY	10
REENLISTING FROM ANOTHER BRANCH OR SERVICE	4
OTHER	<u>1</u>
	100

TABLE 4

JOB INTEREST
(PERCENT RESPONDING)

	TOTAL SAMPLE N=202	TAC 1ST ENLIST N=132	ADC 1ST ENLIST N=30	OTHER AF SPECIALTIES* N=21,107
I FIND MY JOB:				
INTERESTING	32	23	27	69
SO-SO	27	29	40	15
DULL	41	48	33	16

* Based on responses from incumbents in 35 other career ladders surveyed during 1975

TABLE 5

PERCEIVED UTILIZATION OF TALENTS AND TRAINING
(PERCENT RESPONDING)

	TOTAL SAMPLE N=202	COMMAND	
		TAC 1ST ENLIST N=132	ADC 1ST ENLIST N=30
MY JOB UTILIZES MY TALENTS:			
VERY LITTLE OR NOT AT ALL	63	73	63
FAIRLY WELL	27	23	30
QUITE WELL TO PERFECTLY	10	4	7
MY JOB UTILIZES MY TRAINING:			
VERY LITTLE OR NOT AT ALL	61	64	67
FAIRLY WELL	30	29	23
QUITE WELL TO PERFECTLY	9	7	10
MY JOB UTILIZES MY TALENTS AND TRAINING:*			
VERY LITTLE OR NOT AT ALL	26		
FAIRLY WELL	26		
QUITE WELL TO PERFECTLY	48		

* These figures represent an average percent from data collected on 35 career ladders surveyed during 1975

TABLE 6
REENLISTMENT PLANS
(PERCENT RESPONDING)

	TOTAL SAMPLE N=202	1ST TERM	
		TAC N=134	ADC N=30
I PLAN TO REENLIST:			
YES OR PROBABLY YES	39	37	17
NO OR PROBABLY NO	61	63	83

TABLE 7
ACTUAL REENLISTMENTS
FY 1976

	<u>1ST TERM</u>	<u>2ND TERM</u>	<u>CAREER</u>	<u>OVERALL</u>
NUMBER ELIGIBLE	169	26	65	270
NUMBER REENLISTED	47	20	59	126
RATE OF REENLISTMENT	28 %	56 %	91 %	47 %

TABLE 8

COMMON TEST EQUIPMENT USED *
(20% OR MORE PERFORMING)

	TOTAL SAMPLE	1ST ENLISTMENT 1-48 MONTHS	
		TAC	ADC
MULTIMETER	74	74	67
IGNITER TEST SET	72	78	50
DIGITAL VOLTMETER	56	59	33
FREQUENCY METER	54	58	33
OSCILLOSCOPE	51	42	80
ALIGNMENT FIXTURE	48	56	20
POWER SUPPLY (DC)	45	50	27
ELECTRONIC COUNTER	45	51	17
POWER SUPPLY (AC)	44	52	30
AUDIO SIGNAL GENERATOR	40	47	3
DIFFERENTIAL VOLTMETER	39	37	23
VACUUM TUBE VOLTMETER (AC)	36	33	17
DECADE RESISTOR	35	42	7
VACUUM TUBE VOLTMETER (DC)	33	34	17
RF SIGNAL GENERATOR	26	27	33
PULSE GENERATOR	20	17	67

* All numbers expressed as percentages

TABLE 9

SPECIFIC TEST EQUIPMENT OPERATED OR MAINTAINED *
(20% OR MORE PERFORMING)

EQUIPMENT	TOTAL SAMPLE	1ST ENLISTMENT 1-48 MONTHS	
		TAC	ADC
TEST SET (DPM-14A)	33	44	3
GUIDANCE SYSTEM TEST SET	21	27	3
TEST SET (DSM 68A)	18	26	3
TEST SET (DSM 99)	16	21	3
TEST SET (DSM 100)	17	22	3
TEST SET (DSM 129)	19	24	3
TEST CONSOLE-AIM-4 F/G	8	-	50
TEST CONSOLE-AIM-4 A/D/26-A/B	5	-	27
TEST BENCH-AIM-4 F/G	4	-	20

* All numbers expressed as percentages

TABLE 10

GROUND EQUIPMENT OPERATED*
(20% OR MORE PERFORMING)

EQUIPMENT	TOTAL SAMPLE	1ST ENLISTMENT 1-48 MONTHS	
		TAC	ADC
TRACTOR (FARM)	77	82	80
MISSILE TRAILER (MHV-12)	73	87	37
HOIST FIXED	70	77	57
AIR COMPRESSOR (MCIA)	63	78	10
FORKLIFT	62	65	77
TEST STAND (MHV 32 E/U)	59	77	10
POWER GENERATOR (MD-2)	41	52	3
BOMB LIFT (MJ-4)	40	53	3
LIGHTALL (NF-2)	38	48	3
BOMB LIFT (MJ-1)	37	48	3
POWER GENERATOR (MD-1)	22	30	-
AIR COMPRESSOR (MC-2)	22	28	3
HOIST PORTABLE	21	25	13
AIR COMPRESSOR (MB-1)	20	24	7
POWER GENERATOR (MD-3)	19	26	3

* All numbers expressed as percentages

ELECTRONICS PRINCIPLES APPLICATION

Airmen in this career ladder employ few electronics principles in their job. Of the 1,257 items in the inventory, only 39 items were answered "Yes" by 30 percent or more of the respondents. Of the 62 specific subject areas, 38 had no questions answered "Yes" by more than 10 percent of the respondents. These subject areas are listed in Table 11.

Thirteen subject areas had "Yes" responses to one or more of the inventory items by from 11 to 29 percent of the respondents. These are listed in Table 12. In only 11 areas were "Yes" responses marked by 30 percent or more of the group surveyed. These are shown in Table 13. Even in these subject areas where 30 percent or more indicated their use of electronics principles, the responses often indicated use of electronics equipment but little application of electronics principles or knowledge concerning that equipment. For example, of 29 questions concerning power supplies, only two questions were marked "Yes" by 30 percent or more of the total sample. These were H483, "In your present job, do you work with power supplies?" (answered "Yes" by 42 percent), and H484, "Do you inspect power supplies?" (answered "Yes" by 31 percent). Such questions as, "Do you troubleshoot to power supply circuit level?" received "Yes" answers from only 15 percent of the total sample and only 26 percent said that they "referred to input voltage," item H495.

During survey administration, ADC personnel contended that their jobs were more electronics oriented than were the jobs performed by TAC personnel, due to both the design and the age of the AIM 4-F and G missiles maintained in ADC units. Comparison of responses by 5-skill level personnel from TAC and ADC appear to support this contention. Table 14 shows the number of "Yes" responses by 30 percent or more of these two groups. When 316X1L personnel are compared with 324X0 (PMEL) personnel on the field utilization of electronics principles, a highly significant difference is found. Two hundred and thirty-six electronics principles items received "Yes" responses from the 324X0 group surveyed, compared with a high of 89 items responded "Yes" to by 316X1L personnel. Although Table 14 presents the results for 5-skill levels only, similar results were obtained for the other skill levels.

Several computer products showing results of the survey are included in the Appendix to this report. Group Summary One (GPSUM1) shows performance data for the total sample and each Duty Air Force Specialty Code (DAFSC). In addition, performance data for the 5- and 7-skill levels working in TAC and ADC are included to reflect specific differences in performance by personnel based on command assignment. Group Summary 2A (GPSM2A) shows performance data for personnel groups based on their time in military service.

It must be stressed that the survey items used in this report do not necessarily represent the items taught in any one ATC basic course, but instead represent all the possible items that might be taught. It is hoped that a careful review of each item will determine its applicability to job utilization for each AFSC in the Air Force. In addition to the identification of overtraining in certain electronics areas, it may be found for some AFSCs that undertraining exists. That is, the data may show a relatively large percent of members using or referring to certain electronics items, when in fact the ATC school may give little or no emphasis in that area.

The data presented in this report can be used for designing course charts, outlines, objectives, tests and various other elements associated with the training process.

CONCLUSION

Overall, the electronics principles field utilization by 316X1L personnel appears to be extremely limited. In light of this result, the present length and content of the ATC electronics principles course for 316X1L personnel should be reviewed.

TABLE 11

REPRESENTATIVE SUBJECT AREAS WHICH HAD VIRTUALLY NO UTILIZATION
(10% OR LESS OF THE SAMPLE MARKED AT LEAST ONE RESPONSE)

MICROPHONES	WAVE SHAPING CIRCUITS
SPEAKERS	SINGLE SIDEBAND SYSTEMS
TRANSISTOR AMPLIFIERS	PULSE MODULATION SYSTEMS
MULTIVIBRATORS	TRANSMISSION LINES
LIMITERS AND CLAMPERS	REGISTERS
AM SYSTEMS	DIGITAL AND ANALOG CONVERTERS
FM SYSTEMS	PHANTASTRONS
NUMBERING SYSTEMS	SCHMITT TRIGGERS
BOOLEAN EQUATIONS	DISPLAY TUBES
SATURABLE REACTORS AND	PROGRAMMING
MAGNETIC AMPLIFIERS	

TABLE 12

SUBJECT AREAS WITH LIMITED UTILIZATION
(AT LEAST ONE RESPONSE MARKED BY 11% TO 29% OF THE SAMPLE)

INDUCTORS AND INDUCTIVE REACTANCE
 CAPACITORS AND CAPACITIVE REACTANCE
 TRANSFORMERS
 MAGNETISM
 RELAYS
 SOLID-STATE SPECIAL PURPOSE DEVICES
 ELECTRON TUBES
 COUNTERS
 TIMING CIRCUITS
 MOTORS AND GENERATORS
 ANTENNAS
 WAVEGUIDES AND CAVITY REASONATORS
 INPUT/OUTPUT DEVICES

TABLE 13

SUBJECT AREAS WITH REASONABLE UTILIZATION
(AT LEAST ONE RESPONSE MARKED BY 30% OR MORE OF THE SAMPLE)

MATHEMATICS
DIRECT CURRENT AND VOLTAGE
RESISTANCE
MULTIMETER USES
ALTERNATING CURRENT
SOLDERING
OSCILLOSCOPES
POWER SUPPLIES
USE OF SIGNAL GENERATORS
METER MOVEMENTS
INFRARED

TABLE 14

UTILIZATION OF ELECTRONICS PRINCIPLES ITEMS BY TAC 316X1L PERSONNEL,
ADC 316X1L PERSONNEL, AND 324X0 (PMEL) PERSONNEL
(NUMBER OF "YES" RESPONSES MARKED BY 30% OR MORE OF THE SAMPLE)

	<u>316X1L</u>		<u>324X0</u>
	<u>TAC</u>	<u>ADC</u>	<u>ALL COMMANDS</u>
5-SKILL LEVEL	27	89	536

READING THE COMPUTER PRINTOUTS (GPSUM1, GPSM2A, AND JOBINV)
WHICH ARE IN THE APPENDIX

GPSUM1 is a summary which gives the percent of members of a group which responded "Yes" to the items in the survey booklet. At the top of each column of numbers on any page of GPSUM1 are the following Group Identifiers and Groups:

- SPL027 - All airmen in Career Ladder 316X1/31790 (202 persons)
- SPL028 - All airmen DAFSC 31631L (30 persons)
- SPL029 - All airmen DAFSC 31651L (136 persons)
- SPL030 - All airmen DAFSC 31671L (29 persons)
- SPL031 - All airmen DAFSC 31790* (5 persons)
- SPL041 - All airmen 31651L in TAC (107 persons)
- SPL042 - All airmen 31651L in ADC (27 persons)
- SPL043 - All airmen 31671L in TAC (20 persons)
- SPL044 - All airmen 31671L in ADC (8 persons)

GPSM2A is a summary which gives the percent of members of a group which responded "Yes" to the items in the survey booklet. At the top of each column of numbers on any page of GPSM2A are the following Group Identifiers and Groups:

- SPL032 - All airmen with 6-24 months in the career field (115 persons)
- SPL033 - All airmen with 25-48 months in the career field (40 persons)
- SPL034 - All airmen with 1-48 months in the career field (164 persons)
- SPL035 - All airmen with 49-96 months in the career field (13 persons)
- SPL036 - All airmen with 97-144 months in the career field (11 persons)
- SPL037 - All airmen with 145+ months in the career field (14 persons)

To conserve space, some of the items have been abbreviated in GPSUM1 and GPSM2A in the Appendix. Each item has been listed in its entirety in the Job Inventory (JOBINV) beginning on page 92 of the Appendix. For example, Task A-1, page 4, GPSUM1, is incomplete. In order to find the complete statement, turn to page 92 of the Appendix and read item A-1.

* Converted to 31693 on 30 April 1976

APPENDIX

SEE PAGE 1 OF THE APPENDIX WHICH GIVES THE TABLE OF CONTENTS WHICH INCLUDES THE APPROPRIATE PAGES FOR GPSUM1, GPSM2A, AND THE COMPLETE ELECTRONICS PRINCIPLES ITEMS CONTAINED IN JOBINV.

APPENDIX

TABLE OF CONTENTS

TOC PAGE 1

REPORT NUMBER	REPORT ID	REPORT TITLE	PAGE NUMBER
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PERCENT MEMBERS PERFORMING TASKS BY DAFSC GRPS

TABLE OF PERCENT MEMBERS PERFORMING DUTIES AND TASKS BY DAFSC GROUP
IN THE 316XIL/31790 CAREER FIELD.

REPORTS ON THE FOLLOWING GROUPS WERE REQUESTED

GROUP IDENTITY = SPL027	ALL AIRMEN IN CAREER FIELD 316XIL/31790	CONTAINING	202 MEMBERS.
GROUP IDENTITY = SPL028	ALL AIRMEN DAFSC 31631L	CONTAINING	30 MEMBERS.
GROUP IDENTITY = SPL029	ALL AIRMEN DAFSC 31651L	CONTAINING	134 MEMBERS.
GROUP IDENTITY = SPL030	ALL AIRMEN DAFSC 31671L	CONTAINING	29 MEMBERS.
GROUP IDENTITY = SPL031	ALL AIRMEN DAFSC 31790	CONTAINING	6 MEMBERS.
GROUP IDENTITY = SPL081	ALL AIRMEN 31651L IN TAC	CONTAINING	107 MEMBERS.
GROUP IDENTITY = SPL082	ALL AIRMEN 31651L IN ADC	CONTAINING	27 MEMBERS.
GROUP IDENTITY = SPL093	ALL AIRMEN 31671L IN TAC	CONTAINING	20 MEMBERS.
GROUP IDENTITY = SPL094	ALL AIRMEN 31671L IN ADC	CONTAINING	8 MEMBERS.

PERCENT MEMBERS PERFORMING TASKS BY DAFSC GRPS

GRPSUMI PAGE 3

DUTY GROUP SUMMARY PERCENT MEMBERS PERFORMING

DUTY	SPL SPL SPL SPL SPL SPL SPL SPL SPL SPL SPL SPL SPL SPL SPL SPL															
	027	028	029	030	031	041	042	043	044	045	046	047	048	049	050	051
A MATHEMATICS, DIRECT CURRENT, VOLTAGE, AND RESISTANCE	85	93	83	90	60	84	78	86	100							
B MULTIMETER USES, ALTERNATING CURRENT, INDUCTORS, AND INDUCTIVE CAPACITORS, CAPACITIVE REACTANCE, TRANSFORMERS, AND MAGNETISM	85	97	86	79	20	87	78	75	88							
C RCL CIRCUITS, SERIES AND PARALLEL RESONANCE (TIME CONSTANTS), AND FILTERS	90	97	38	91	20	36	52	35	50							
D COUPLING, SOLDERING, AND RELAYS	10	10	10	14	0	7	22	5	26							
E MICROPHONES, SPEAKERS, AND OSCILLOSCOPES	41	23	40	46	20	32	74	55	88							
F SEMICONDUCTOR DIODES, TRANSISTORS, AND TRANSISTOR AMPLIFIERS	45	43	45	48	20	36	61	30	88							
G SOLID STATE SPECIAL PURPOSE DEVICES, POWER SUPPLIES, AND OSCILLATORS	11	3	10	24	20	6	26	20	26							
H MULTIVIBRATORS, LIMITERS, CLAMPERS, AND ELECTRON TUBES	49	60	49	45	20	49	48	45	38							
I ELECTRON TUBE AMPLIFIERS AND CIRCUITS, SPECIAL PURPOSE ELECTRON TUBES, METEORODINING, MODULATION, AM SYSTEMS, FM SYSTEMS, AND NUMBERING SYSTEMS	13	17	12	21	0	3	44	5	50							
J LOGIC FUNCTIONS, BOOLEAN EQUATIONS, AND COUNTERS	13	17	13	14	0	6	41	0	38							
K TIMING CIRCUITS, USE OF SIGNAL GENERATORS, MOTORS, AND GENERATORS	7	13	7	7	0	5	15	0	26							
L METER MOVEMENTS, SATURABLE REACTORS, MAGNETIC AMPLIFIERS, AND PULSE MODULATION	19	17	21	14	20	23	11	20	0							
M SINGLE SIDEBAND SYSTEMS, PULSE MODULATION SYSTEMS, AND ANTENNAS	48	33	54	38	20	53	56	40	25							
N TRANSMISSION LINES, WAVEGUIDES AND CAVITY RESONATORS, AND MICROWAVE AMPLIFIERS AND OSCILLATORS	53	63	54	45	20	53	59	45	38							
O DIGITAL TO ANALOG CONVERTERS	29	20	37	10	0	37	33	5	25							
P PHOTODIODES, SCHMITT TRIGGERS, AND CABLE FABRICATION	21	23	21	24	0	20	30	20	25							
Q INPUT/OUTPUT DEVICES, PHOTO SENSITIVE DEVICES, AND SYNCHRONOUS VIBRATIONS	10	3	13	7	0	15	7	5	13							
R INFRARED, LASERS, AND DISPLAY TUBES	13	3	10	31	20	8	19	25	38							
S PROGRAMMING, DB AND POWER RATIOS	23	13	26	24	0	27	19	20	38							
T	46	47	49	34	20	45	63	25	50							
U	12	7	9	28	40	6	22	15	50							

PERCENT MEMBERS PERFORMING

[illegible]

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
	027	028	029	030	031	041	042	043	044	045
A 34 A3-11 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE TOLERANCE.	17	17	14	28	20	9	33	20	60	
A 35 A3-12 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE FAILURE RATE.	4	7	4	0	0	3	11	0	0	
A 36 A3-13 DO YOU MAKE DECISIONS IN WHICH YOU MUST DETERMINE HOW TWO OR MORE BATTERIES MUST BE CONNECTED TOGETHER TO REPRESENT BATTERIES, FUSES, CONDUCTORS, LAMPS, OR SWITCHES	7	7	6	7	20	2	22	0	25	
A 37 A3-14 DO YOU USE OR REFER TO THE SCHEMATIC SYMBOLS WHICH REPRESENT BATTERIES, FUSES, CONDUCTORS, LAMPS, OR SWITCHES	32	30	30	38	40	29	37	30	50	
A 38 A3-15 DO YOU CALCULATE TOTAL RESISTANCE FOR SERIES RESISTIVE CIRCUITS.	10	7	11	10	0	7	30	5	25	
A 39 A3-16 DO YOU CALCULATE TOTAL CURRENT FOR SERIES RESISTIVE CIRCUITS.	9	7	10	7	0	7	26	5	13	
A 40 A3-17 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR SERIES RESISTIVE CIRCUITS.	9	7	9	10	0	5	26	5	25	
A 41 A3-18 DO YOU CALCULATE POWER DISSIPATION FOR SERIES RESISTIVE CIRCUITS.	7	7	7	7	0	4	19	5	13	
A 42 A3-19 DO YOU CALCULATE TOTAL RESISTANCE FOR SERIES PARALLEL RESISTIVE CIRCUITS.	8	7	8	10	0	6	19	5	25	
A 43 A3-20 DO YOU CALCULATE TOTAL CURRENT FOR SERIES PARALLEL RESISTIVE CIRCUITS.	8	7	8	7	0	6	19	5	13	
A 44 A3-21 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR SERIES PARALLEL RESISTIVE CIRCUITS.	7	7	7	10	0	4	19	5	25	
A 45 A3-22 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENTS FOR SERIES PARALLEL RESISTIVE CIRCUITS.	7	7	7	7	0	4	19	5	13	
A 46 A3-23 DO YOU CALCULATE POWER DISSIPATION FOR SERIES PARALLEL RESISTIVE CIRCUITS.	6	7	6	7	0	4	15	5	13	
A 47 A3-24 DO YOU CALCULATE TOTAL RESISTANCE FOR PARALLEL RESISTIVE CIRCUITS.	7	7	7	10	0	5	19	5	25	
A 48 A3-25 DO YOU CALCULATE TOTAL CURRENT FOR PARALLEL RESISTIVE CIRCUITS.	6	3	7	7	0	4	19	5	13	
A 49 A3-26 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR PARALLEL RESISTIVE CIRCUITS.	6	3	6	10	0	3	19	5	25	
A 50 A3-27 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENTS FOR PARALLEL RESISTIVE CIRCUITS.	6	3	6	10	0	3	19	5	25	
A 51 A3-28 DO YOU CALCULATE POWER DISSIPATION FOR PARALLEL RESISTIVE CIRCUITS.	5	3	6	7	0	4	15	5	13	
A 52 A3-01 DO YOU MEASURE RESISTANCE.	75	87	76	69	20	76	74	45	75	
A 53 A3-02 DO YOU REPAIR OHMMETERS.	3	3	3	3	0	2	7	5	0	
A 54 A3-03 DO YOU MEASURE VOLTAGE.	73	77	74	69	20	74	74	65	75	
A 55 A3-04 DO YOU REPAIR VOLTMETERS.	3	0	3	7	0	2	7	5	13	
A 56 A3-05 DO YOU REPAIR AMMETERS.	2	0	2	3	0	0	11	5	0	
A 57 A3-06 DO YOU MEASURE CURRENT.	48	50	50	45	0	50	52	40	50	
A 58 A3-07 DO YOU USE MULTIMETERS.	74	87	75	66	20	78	63	65	75	
A 59 A3-08 DO YOU DIRECTLY USE A QUANTITY OF CHARGE CALLED A COULOMB.	3	3	3	7	0	3	4	10	0	
A 60 A3-09 DO YOU READ SCHEMATICS.	55	47	55	69	20	53	67	45	75	

MULTIMETER USES

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

0Y-75K

[illegible]

TASK GROUP SUMMARY

PERCENT MEMBERS PERFORMING

[illegible]

PERCENT MEMBERS PERFORMING TASKS BY DAFSC GRPS

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TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING

	DY-TSK											
	SPL 027	SPL 028	SPL 029	SPL 030	SPL 031	SPL 041	SPL 042	SPL 043	SPL 044			
C 179 C3-09 DO YOU USE OR REFER TO DOMAIN THEORY OF MAGNETISM	1	0	2	0	0	1	7	0	0			
C 180 C3-10 DO YOU USE OR REFER TO MAGNETIC INDUCTION	5	0	6	7	0	4	15	5	13			
C 181 C3-11 DO YOU USE OR REFER TO FLUX DENSITY	2	0	4	0	0	2	11	0	0			
C 182 C3-12 DO YOU USE OR REFER TO THE GENERAL RULE THAT FOR MAGNETIC POLES, LIKE POLES REPEL AND UNLIKE POLES ATTRACT	11	13	11	14	0	9	19	10	13			
C 183 C3-13 DO YOU USE THE LEFT HAND THUMB RULE TO FIND THE DIRECTION OF MAGNETIC FIELDS ABOUT STRAIGHT WIRES	4	0	6	3	0	5	11	5	0			
C 184 C3-14 DO YOU USE THE LEFT HAND THUMB RULE TO FIND THE NORTH POLE OF A CURRENT CARRYING COIL	4	3	5	3	0	4	11	5	0			
D 185 D1-01 DO YOU WORK WITH RCL, LR, RCL CIRCUITS IN YOUR PRESENT JOB	4	0	5	7	0	2	19	0	25			
D 186 D1-02 DO YOU USE OR REFER TO VECTORS WHEN WORKING WITH RCL CIRCUITS	0	0	1	0	0	0	4	0	0			
D 187 D1-03 DO YOU USE OR REFER TO PYTHAGOREAN THEOREM WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	0	0	0	0	0			
D 188 D1-04 DO YOU USE OR REFER TO SINE WHEN WORKING WITH RCL CIRCUITS	1	0	1	0	0	1	4	0	0			
D 189 D1-05 DO YOU USE OR REFER TO COSINE WHEN WORKING WITH RCL CIRCUITS	0	0	1	0	0	0	4	0	0			
D 190 D1-06 DO YOU USE OR REFER TO TANGENT WHEN WORKING WITH RCL CIRCUITS	1	0	1	0	0	1	4	0	0			
D 191 D1-07 DO YOU USE OR REFER TO WATTS WHEN WORKING WITH RCL CIRCUITS	4	0	4	10	0	2	11	0	25			
D 192 D1-08 DO YOU USE OR REFER TO TRUE POWER (PT) WHEN WORKING WITH RCL CIRCUITS	1	0	1	0	0	0	7	0	0			
D 193 D1-09 DO YOU USE OR REFER TO MAXIMUM POWER (PM) WHEN WORKING WITH RCL CIRCUITS	2	0	3	0	0	1	11	0	0			
D 194 D1-10 DO YOU USE OR REFER TO AVERAGE POWER (PAVE) WHEN WORKING WITH RCL CIRCUITS	2	0	3	0	0	1	11	0	0			
D 195 D1-11 DO YOU USE OR REFER TO APPARENT POWER (PA) WHEN WORKING WITH RCL CIRCUITS	1	0	1	0	0	0	7	0	0			
D 196 D1-12 DO YOU USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH RCL CIRCUITS	1	0	2	0	0	1	7	0	0			
D 197 D1-13 DO YOU USE OR REFER TO RESONANT CIRCUITS WHEN WORKING WITH RCL CIRCUITS	3	0	2	10	0	0	11	0	25			
D 198 D1-14 DO YOU USE OR REFER TO BANDWIDTH WHEN WORKING WITH RCL CIRCUITS	4	0	4	10	0	3	11	0	25			
D 199 D1-15 DO YOU USE OR REFER TO SELECTIVITY WHEN WORKING WITH RCL CIRCUITS	3	0	4	7	0	2	11	0	25			
D 200 D1-16 DO YOU USE OR REFER TO RESONANT FREQUENCY WHEN WORKING WITH RCL CIRCUITS	4	0	4	10	0	2	11	0	25			
D 201 D1-17 DO YOU USE OR REFER TO HALF POWER POINTS WHEN WORKING WITH RCL CIRCUITS	2	0	1	7	0	0	7	0	25			
D 202 D1-18 DO YOU USE OR REFER TO BANDPASS REGION WHEN WORKING WITH RCL CIRCUITS	2	0	3	0	0	1	11	0	0			
D 203 D1-19 DO YOU USE OR REFER TO CIRCUIT Q WHEN WORKING WITH RCL CIRCUITS	0	0	1	0	0	0	4	0	0			

PERCENT MEMBERS PERFORMING TASKS BY DAFSC GRPS

GPSUM1 PAGE 11

TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING

DY-TSK

	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
	027	028	029	030	031	041	042	043	044
0 204 01-20 DO YOU USE OR REFER TO TASK CIRCUITS WHEN WORKING WITH RCL CIRCUITS	3	0	4	7	0	1	15	0	13
0 205 01-21 DO YOU DETERMINE VALUES OF TRIGONOMETRIC FUNCTIONS USING FORMULAS	0	0	1	0	0	1	0	0	0
0 206 01-22 DO YOU DRAW VOLTAGE, CURRENT, OR IMPEDANCE VECTOR DIAGRAMS FOR CIRCUITS	0	0	0	0	0	0	0	0	0
0 207 01-23 DO YOU CALCULATE TOTAL IMPEDANCE FOR CAPACITIVE CIRCUITS	0	0	0	0	0	0	0	0	0
0 208 01-24 DO YOU CALCULATE PHASE ANGLES BETWEEN IMPEDANCE AND RESISTANCE IN CAPACITIVE CIRCUITS	0	0	0	0	0	0	0	0	0
0 209 01-25 DO YOU CALCULATE TOTAL IMPEDANCE FOR SERIES RCL CIRCUITS	0	0	1	0	0	0	4	0	0
0 210 01-26 DO YOU CALCULATE IMPEDANCE ANGLES FOR SERIES RCL CIRCUITS	0	0	1	0	0	0	4	0	0
0 211 01-27 DO YOU CALCULATE APPARENT POWER (PA) FOR SERIES RCL CIRCUITS	0	0	1	0	0	0	4	0	0
0 212 01-28 DO YOU CALCULATE TRUE POWER (PT) FOR SERIES RCL CIRCUITS	0	0	1	0	0	0	4	0	0
0 213 01-29 DO YOU CALCULATE POWER FACTORS (PF) FOR SERIES RCL CIRCUITS	0	0	1	0	0	0	4	0	0
0 214 01-30 DO YOU CALCULATE TOTAL CURRENT FOR PARALLEL RCL CIRCUITS	0	0	1	0	0	0	4	0	0
0 215 01-31 DO YOU CALCULATE IMPEDANCE ANGLES FOR PARALLEL RCL CIRCUITS	0	0	1	0	0	0	4	0	0
0 216 01-32 DO YOU CALCULATE TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS USING THE ASSUMED VOLTAGE METHOD	0	0	1	0	0	0	4	0	0
0 217 01-33 DO YOU CALCULATE TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS USING OHM'S LAW	1	0	1	0	0	0	7	0	0
0 218 01-34 DO YOU CHECK CAPACITORS USING OHMMETERS	4	0	4	10	0	2	15	0	25
0 219 01-35 DO YOU CHECK CAPACITORS USING SUBSTITUTION	4	0	4	10	0	2	11	0	25
0 220 01-36 DO YOU CHECK INDUCTORS USING OHMMETERS	4	0	4	10	0	2	15	0	25
0 221 01-37 DO YOU CHECK INDUCTORS USING SUBSTITUTION	3	0	3	10	0	1	11	0	25
0 222 01-38 DO YOU USE OR REFER TO THE GENERAL RULE THAT $\theta = 0$, $P_F = 1$, AND $P_A = P_T$ FOR RESONANT CIRCUITS	0	0	0	0	0	0	0	0	0
0 223 01-39 DO YOU CALCULATE RESONANT FREQUENCIES FOR RCL CIRCUITS	0	0	0	0	0	0	0	0	0
0 224 01-40 DO YOU USE OR REFER TO THE GENERAL RULE THAT IMPEDANCE IS MINIMUM AND CURRENT MAXIMUM AT THE RESONANT	1	0	1	3	0	1	4	0	13
0 225 01-41 DO YOU USE OR REFER TO THE GENERAL RULE THAT LINE CURRENT IS MINIMUM AND IMPEDANCE MAXIMUM AT RESONANT	1	0	1	3	0	0	4	0	13
0 226 01-42 DO YOU USE OR REFER TO THE GENERAL RULE THAT HALF POWER POINTS ARE AT 70.7 PERCENT OF THE PEAK CURRENT VALUE	0	0	0	0	0	0	0	0	0
0 227 01-43 DO YOU USE OR REFER TO THE GENERAL RULE THAT BANDWIDTH IS INVERSELY PROPORTIONAL TO Q	0	0	0	0	0	0	0	0	0
0 228 01-44 DO YOU DETERMINE HOW CHANGES IN FREQUENCY, RESISTANCE, CAPACITANCE, OR INDUCTANCE WILL AFFECT CURRENT OR PHASE	1	0	1	3	0	0	4	0	13

TASK GROUP SUMMARY

PERCENT MEMBERS PERFORMING

DY-TSK

	SPL 027	SPL 028	SPL 029	SPL 030	SPL 031	SPL 041	SPL 042	SPL 043	SPL 044	
0 229 D2-01 IN YOUR PRESENT JOB, DO YOU WORK WITH, USE, OR REFER TO SERIES OR PARALLEL RESONANT CIRCUITS OR TIME CONSTANTS	3	0	5	0	0	4	11	0	0	SERIES AND PARALLEL RESONANCE (TIME CONSTANTS)
0 230 D2-02 DO YOU WORK WITH, USE, OR REFER TO TIME CONSTANTS	2	3	3	0	0	2	7	0	0	
0 231 D2-03 DO YOU WORK WITH, USE, OR REFER TO AVAILABLE VOLTAGE	2	3	2	0	0	1	7	0	0	
0 232 D3-04 DO YOU WORK WITH, USE, OR REFER TO TRANSIENT INTERVALS	1	3	1	0	0	0	4	0	0	
0 233 D2-05 DO YOU USE OR REFER TO THE GENERAL RULE THAT A CAPACITOR IS FULLY CHARGED (OR DISCHARGED) AFTER FIVE (5) TIME CONSTANTS	2	3	1	3	0	1	4	0	0	
0 234 D2-06 DO YOU USE OR REFER TO UNIVERSAL TIME CONSTANT CHARTS	2	7	1	0	0	1	4	0	0	
0 235 D2-07 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CIRCUIT CURRENT OR COMPONENT VOLTAGES AFTER A SPECIFIC TIME REQUIRED FOR CIRCUIT CURRENT OR COMPONENT VOLTAGES TO DETERMINE THE	0	0	1	0	0	0	4	0	0	
0 237 D2-09 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE COMPONENT VALUES REQUIRED FOR CIRCUIT CURRENT AND	1	0	1	0	0	0	7	0	0	
0 238 D2-10 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT IN LR CIRCUITS REACHES ITS MINIMUM VALUE (OR ZERO) AFTER PRESENT JOB	1	3	1	0	0	0	4	0	0	
0 239 D3-01 DO YOU WORK WITH CIRCUITS USED AS FILTERS IN YOUR PRESENT JOB	6	7	6	10	0	3	19	5	25	
0 240 D3-02 DO YOU INSPECT FILTER CIRCUITS	6	7	5	10	0	3	15	0	25	
0 241 D3-03 DO YOU CLEAN FILTER CIRCUITS	5	3	4	10	0	2	15	0	25	
0 242 D3-04 DO YOU ALIGN OR ADJUST FILTER CIRCUITS	5	7	4	10	0	2	15	0	25	FILTERS
0 243 D3-05 DO YOU TROUBLESHOOT TO THE FILTER CIRCUIT LEVEL	4	3	4	10	0	1	15	0	25	
0 244 D3-06 DO YOU TROUBLESHOOT TO COMPONENT PARTS	5	7	4	10	0	1	19	0	25	
0 245 D3-07 DO YOU REMOVE OR REPLACE THE COMPLETE FILTER CIRCUIT PARTS	4	3	4	7	0	1	19	0	13	
0 246 D3-08 DO YOU REMOVE OR REPLACE FILTER CIRCUIT COMPONENT PARTS	5	3	4	14	0	1	19	5	25	
0 247 D3-09 DO YOU WORK WITH LOW PASS FILTERS	3	3	3	3	0	1	11	0	13	
0 248 D3-10 DO YOU WORK WITH HIGH PASS FILTERS	3	3	3	3	0	1	11	0	13	
0 249 D3-11 DO YOU WORK WITH BANDPASS FILTERS	3	3	3	7	0	1	11	0	25	
0 250 D3-12 DO YOU WORK WITH BAND-REJECT FILTERS	3	3	2	7	0	0	11	0	25	
0 251 D3-13 DON'T REMEMBER WHICH TYPE OF FILTER YOU WORK WITH	3	0	3	7	0	1	11	5	0	
0 252 D3-14 DO YOU WORK WITH L-SECTION FILTER CONFIGURATION	1	3	1	3	0	0	4	0	13	
0 253 D3-15 DO YOU WORK WITH T-SECTION FILTER CONFIGURATION	2	3	1	7	0	0	4	5	13	
0 254 D3-16 DO YOU WORK WITH PI-SECTION FILTER CONFIGURATION	2	3	1	7	0	0	4	5	13	
0 255 D3-17 DON'T REMEMBER WHICH TYPE FILTER CONFIGURATION	3	0	4	3	0	1	15	0	0	
0 256 D3-18 DO THE FILTERS YOU WORK WITH USE PARALLEL RESONANT CIRCUITS	4	3	4	7	0	2	11	0	25	
0 257 D3-19 DO THE FILTERS YOU WORK WITH USE SERIES-PARALLEL CIRCUITS	3	3	3	7	0	1	11	0	25	
0 258 D3-20 DO THE FILTERS YOU WORK WITH USE SERIES RESONANT CIRCUITS	3	3	3	7	0	1	11	0	25	

PERCENT MEMBERS PERFORMING

[illegible]

PERCENT MEMBERS PERFORMING TASKS BY DAFSC GRPS

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TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING

DY-TSK													SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
													027	028	029	030	031	041	042	043	044
7 327 F2-01	IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING	1	3	0	3	0	0	0	0	5	0										
WITH SPEAKERS																					
F 328 F2-02	DO YOU INSPECT SPEAKERS	0	0	0	3	0	0	0	0	5	0										
F 329 F2-03	DO YOU CLEAN SPEAKERS	0	0	0	0	0	0	0	0	0	0										
F 330 F2-04	DO YOU OPERATE SPEAKERS	1	7	0	0	0	0	0	0	0	0										
F 331 F2-05	DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE	0	0	0	3	0	0	0	0	5	0										
CONNECTIONS BUT DO NOT TROUBLESHOOT DOWN TO COMPONENT																					
F 332 F2-06	DO YOU TROUBLESHOOT DOWN TO SPEAKER PARTS	0	0	0	0	0	0	0	0	0	0										
F 333 F2-07	DO YOU REMOVE OR REPLACE COMPLETE SPEAKERS	0	0	0	3	0	0	0	0	5	0										
F 334 F2-08	DO YOU REMOVE OR REPLACE SPEAKER PARTS	0	0	0	0	0	0	0	0	0	0										
F 335 F2-09	DO YOU PERFORM ANY TASKS ON SPEAKER CONES	0	0	0	0	0	0	0	0	0	0										
F 336 F2-10	DO YOU PERFORM ANY TASKS ON SPEAKER SPIDERS	0	0	0	0	0	0	0	0	0	0										
F 337 F2-11	DO YOU PERFORM ANY TASKS ON SPEAKER FIELD COILS	0	0	0	0	0	0	0	0	0	0										
F 338 F2-12	DO YOU PERFORM ANY TASKS ON SPEAKER VOICE COILS	0	0	0	0	0	0	0	0	0	0										
F 339 F2-13	DO YOU PERFORM ANY TASKS ON SPEAKER PERMANENT MAGNETS	0	0	0	0	0	0	0	0	0	0										
F 340 F2-14	DO YOU PERFORM ANY TASKS ON SPEAKER ELECTROMAGNETS	0	0	0	0	0	0	0	0	0	0										
F 341 F2-15	DO YOU PERFORM ANY TASKS ON SPEAKER SOFT IRON CORES	0	0	0	0	0	0	0	0	0	0										
F 342 F3-01	DO YOU USE OSCILLOSCOPES IN YOUR PRESENT JOB	41	37	41	45	20	34	74	30	75											
F 343 F3-02	DO YOU USE OSCILLOSCOPES TO PERFORM OPERATIONAL	31	30	30	38	20	21	70	25	63											
CHECKS																					
F 344 F3-03	DO YOU USE OSCILLOSCOPES TO PERFORM ALIGNMENTS OR	33	27	33	38	20	24	70	30	50											
ADJUSTMENTS																					
F 345 F3-04	DO YOU USE OSCILLOSCOPES TO TROUBLESHOOT ELECTRONIC	26	23	25	31	20	21	44	20	50											
CIRCUITS																					
F 346 F3-05	DO YOU USE OSCILLOSCOPES TO MEASURE FREQUENCY	39	37	34	34	20	28	54	25	50											
F 347 F3-06	DO YOU USE OSCILLOSCOPES TO MEASURE TIME	32	30	32	45	0	23	67	30	75											
F 348 F3-07	DO YOU USE OSCILLOSCOPES TO OBSERVE LISAIOUS PATTERNS	6	13	6	0	0	3	19	0	0											
F 349 F3-08	DO YOU USE OSCILLOSCOPES TO OBSERVE SIGNALS WHILE	18	13	16	31	0	15	22	20	50											
UTILIZING ATTENUATION PROBES																					
F 350 F3-09	DO YOU USE OSCILLOSCOPES TO MAKE FREQUENCY OR TIME	25	23	24	34	0	16	56	15	75											
MEASUREMENTS USING DELAY TIME MULTIPLIERS																					
F 351 F3-10	DO YOU USE OSCILLOSCOPES TO MEASURE AC VOLTAGE	28	17	30	31	20	26	48	20	50											
F 352 F3-11	DO YOU USE OSCILLOSCOPES TO MEASURE OR OBSERVE	16	10	15	21	20	12	30	15	38											
SIGNALS AFTER FIRST ADJUSTING THE GAIN AND DC BAL CONTROLS																					
F 353 F3-12	DO YOU USE OSCILLOSCOPES TO MEASURE DC VOLTAGE	24	10	26	31	20	23	37	20	50											
F 354 G1-01	DO YOU WORK WITH SEMICONDUCTION DIODES IN YOUR PRESENT	10	3	8	21	20	5	22	15	28											
JOB																					
G 355 G1-02	DO YOU INSPECT DIODES	9	3	7	21	0	4	22	15	25											
G 356 G1-03	DO YOU REMOVE OR REPLACE DIODES	9	0	7	21	20	4	22	15	25											
G 357 G1-04	DO YOU CHECK DIODES USING AN INSTRUMENT	8	3	7	19	20	4	22	5	25											
G 358 G1-05	DO YOU USE ENERGY LEVEL DIAGRAMS IN YOUR WORK WITH	0	0	0	3	0	0	0	5	0											
DIODES																					
G 359 G1-06	DO YOU USE PN JUNCTION DIODE CHARACTERISTIC CURVES;	1	0	1	3	0	1	0	5	0											
TOGETHER WITH VALUES OF FORWARD AND REVERSE BIAS VOLTAGE;																					
G 360 G1-07	DO YOU COMPUTE FORWARD OR REVERSE BIAS RESISTANCE FOR	2	0	2	3	0	1	7	5	0											
DIODES																					

PERCENT MEMBERS PERFORMING

[illegible]

PERCENT MEMBERS PERFORMING TASKS BY DAFSC GRPS

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TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		SPL SPL SPL SPL SPL SPL SPL SPL SPL SPL SPL SPL SPL SPL SPL SPL															
		027 028 029 030 031 041 042 043 044															
BY-TSK																	
6 383	61-30 DO YOU USE OR REFER TO FORBIDDEN BAND IN SEMICONDUCTOR MATERIALS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 384	61-31 DO YOU USE OR REFER TO CONDUCTION BAND IN SEMICONDUCTOR MATERIALS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 385	61-32 DO YOU USE OR REFER TO COVALENT BONDING IN SEMICONDUCTOR MATERIALS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 386	61-33 DO YOU USE OR REFER TO ELECTRON-HOLE PAIR CREATED IN SEMICONDUCTORS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 387	61-34 DO YOU USE OR REFER TO ELECTRON FLOW OR HOLE FLOW IN SEMICONDUCTORS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 388	61-35 DO YOU USE OR REFER TO DONOR IMPURITY IN SEMICONDUCTO	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0
6 389	61-36 DO YOU USE OR REFER TO ACCEPTOR IMPURITY IN SEMICONDUCTORS	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0
6 390	61-37 DO YOU USE OR REFER TO P-TYPE SEMICONDUCTOR MATERIAL	1	0	1	0	0	0	1	4	0	0	0	0	0	0	0	0
6 391	61-38 DO YOU USE OR REFER TO N-TYPE SEMICONDUCTOR MATERIAL	1	0	1	0	0	0	1	4	0	0	0	0	0	0	0	0
6 392	61-39 DO YOU USE OR REFER TO MAJORITY CARRIERS IN SEMICONDUCTORS	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
6 393	61-40 DO YOU USE OR REFER TO MINORITY CARRIERS IN SEMICONDUCTORS	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
6 394	61-41 DO YOU USE OR REFER TO JUNCTION RECOMBINATION IN SEMICONDUCTORS	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
6 395	61-42 DO YOU USE OR REFER TO DEPLETION REGION IN SEMICONDUCTORS	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0
6 396	61-43 DO YOU USE OR REFER TO RELATIONSHIP BETWEEN BARRIER WIDTH AND DIFFERENCE OF POTENTIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 397	61-44 DO YOU USE OR REFER TO THE 10:1 BACK TO FRONT RESISTANCE RATIO FOR DIODES	3	3	1	14	20	0	4	10	25							
6 398	61-45 DO YOU USE OR REFER TO BARRIER HEIGHT IN SEMICONDUCTORS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 399	61-46 DO YOU USE OR REFER TO DIODE SUBSTITUTION INFORMATION	4	3	2	10	20	0	11	5	13							
6 400	61-47 DO YOU USE OR REFER TO MAXIMUM AVERAGE FORWARD CURRENT DIODE RATINGS	2	3	1	10	0	1	0	10	13							
6 401	61-48 DO YOU USE OR REFER TO PEAK RECURRENT FORWARD CURRENT DIODE RATINGS	2	3	0	10	0	0	0	10	13							
6 402	61-49 DO YOU USE OR REFER TO MAXIMUM SURGE CURRENT DIODE RATINGS	2	3	0	10	0	0	0	10	13							
6 403	61-50 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE DIODE RATINGS	2	3	1	10	0	1	0	10	13							
6 404	62-01 DO YOU WORK WITH TRANSISTORS IN YOUR PRESENT JOB	6	3	4	10	20	4	7	10	0							
6 405	62-02 DO YOU INSPECT TRANSISTORS	5	3	4	7	20	4	7	10	0							
6 406	62-03 DO YOU REMOVE OR REPLACE TRANSISTORS	4	0	4	7	20	3	7	10	0							
6 407	62-04 DO YOU CHECK TRANSISTORS USING AN INSTRUMENT	5	3	4	7	20	4	4	10	0							
6 408	62-05 DO YOU USE OR REFER TO EMITTER - BASE (EB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS	3	3	2	3	20	2	4	5	0							
6 409	62-06 DO YOU USE OR REFER TO COLLECTOR - BASE (CB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS	3	3	2	3	20	2	4	5	0							

PERCENT MEMBERS PERFORMING TASKS BY DAFSC GRPS

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TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK											
		SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
		027	028	029	030	031	041	042	043	044	045	046	047
6 410	62-07 DO YOU USE OR REFER TO EMITTER - COLLECTOR (EC) RESISTANCE MEASUREMENTS	3	3	2	3	20	2	4	5	0			
6 411	62-08 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE EMITTER - BASE JUNCTION	1	3	1	0	0	1	0	0	0			
6 412	62-09 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE COLLECTOR - BASE JUNCTION	1	3	1	0	0	1	0	0	0			
6 413	62-10 DO YOU USE OR REFER TO THE PHYSICAL SIZE OF THE TRANSISTOR STRUCTURE (COLLECTOR, BASE AND EMITTER)	1	3	1	0	0	0	4	0	0			
6 414	62-11 DO YOU USE OR REFER TO LEAKAGE CURRENT (ICBO) IN A TRANSISTOR	1	3	0	0	20	0	0	0	0			
6 415	62-12 DO YOU USE OR REFER TO TRANSISTOR SCHEMATIC SYMBOLS	5	3	4	7	20	3	7	10	0			
6 416	62-13 DO YOU USE OR REFER TO TRANSISTOR NOTATION SUCH AS Q1, Q2, Q3, ETC	4	3	3	7	20	2	7	10	0			
6 417	62-14 DO YOU USE OR REFER TO TRANSISTOR SUBSTITUTION INFORMATION	3	3	1	7	20	0	4	10	0			
6 418	62-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE TRANSISTOR BASE CURRENT IS NORMALLY SIGNIFICANTLY	0	3	0	0	0	0	0	0	0			
6 419	62-16 DO YOU USE THE INFORMATION THAT THE EFFECT OF EMITTER BASE VOLTAGE ON BASE CURRENT IS THE CONTROLLING FACTOR FOR	1	0	1	3	0	1	0	5	0			
6 420	62-17 DO YOU USE THE GENERAL RULE THAT LEAKAGE CURRENT (ICBO) IN A TRANSISTOR INCREASES AS TEMPERATURE INCREASES	0	0	0	0	0	0	0	0	0			
6 421	62-18 DO YOU USE OR REFER TO TRANSISTOR CHARACTERISTIC CURVES	1	3	1	0	0	1	0	0	0			
6 422	62-19 DO YOU USE OR REFER TO BETA TRANSISTOR GAINS	0	3	0	0	0	0	0	0	0			
6 423	62-20 DO YOU USE OR REFER TO ALPHA TRANSISTOR GAINS	0	3	0	0	0	0	0	0	0			
6 424	62-21 DO YOU USE OR REFER TO GAMMA TRANSISTOR GAINS	0	3	0	0	0	0	0	0	0			
6 425	62-22 DO YOU CALCULATE BETA TRANSISTOR GAINS	0	0	0	0	0	0	0	0	0			
6 426	62-23 DO YOU CALCULATE ALPHA TRANSISTOR GAINS	0	0	0	0	0	0	0	0	0			
6 427	62-24 DO YOU CALCULATE GAMMA TRANSISTOR GAINS	0	0	0	0	0	0	0	0	0			
6 428	62-01 DO YOU WORK WITH TRANSISTOR AMPLIFIERS IN YOUR PRESENT JOB	1	3	1	0	0	2	0	0	0			
6 429	63-02 DO YOU INSPECT TRANSISTOR AMPLIFIERS	1	3	1	0	0	2	0	0	0			
6 430	63-03 DO YOU ALIGN OR ADJUST TRANSISTOR AMPLIFIERS	1	3	1	0	0	1	0	0	0			
6 431	63-04 DO YOU TROUBLESHOOT TO THE AMPLIFIER CIRCUIT LEVEL	1	3	1	0	0	1	0	0	0			
6 432	63-05 DO YOU TROUBLESHOOT TO AMPLIFIER COMPONENTS	1	3	1	0	0	2	0	0	0			
6 433	63-06 DO YOU REMOVE OR REPLACE THE COMPLETE AMPLIFIER	1	0	1	0	0	2	0	0	0			
6 434	63-07 DO YOU REMOVE OR REPLACE AMPLIFIER COMPONENTS	0	0	0	0	0	0	0	0	0			
6 435	63-08 DO YOU USE OR REFER TO (COMMON EMITTER) THE CHANGE IN COLLECTOR CURRENT WHICH RESULTS FROM A CHANGE IN BASE	1	3	1	0	0	1	0	0	0			
6 436	63-09 DO YOU USE OR REFER TO (COMMON EMITTER) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN	1	3	1	0	0	1	0	0	0			

TRANSISTOR
AMPLIFIERS

PERCENT MEMBERS PERFORMING TASKS BY DAFSC GRPS

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TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
	027	028	029	030	031	041	042	043	044
6 437 63-10 DO YOU USE OR REFER TO (COMMON EMITTER) THE CHANGE IN COLLECTOR VOLTAGE WHICH RESULTS FROM A CHANGE IN BASE	1	3	1	0	0	1	0	0	0
6 438 63-11 DO YOU USE OR REFER TO (COMMON EMITTER) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN BASE CURRENT WHICH RESULTS FROM AN INPUT SIGNAL	1	3	1	0	0	1	0	0	0
6 439 63-12 DO YOU USE OR REFER TO (COMMON EMITTER) THE CHANGE IN BASE CURRENT WHICH RESULTS FROM AN INPUT SIGNAL	1	3	1	0	0	1	0	0	0
6 440 63-13 DO YOU USE OR REFER TO (COMMON EMITTER) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN CIRCUIT ANALYSIS (THIS METHOD REQUIRES YOU TO PLOT A QUIESCENT POINT) FOR A TRANSISTOR	0	3	0	0	0	0	0	0	0
6 441 63-14 DO YOU USE THE LOAD-LINE METHOD OF ANALYSIS IN YOUR CIRCUIT ANALYSIS (THIS METHOD REQUIRES YOU TO PLOT A QUIESCENT POINT) FOR A TRANSISTOR	0	0	0	0	0	0	0	0	0
6 442 63-15 DO YOU USE OR REFER TO THE OPERATING POINT Q (QUIESCENT POINT) FOR A TRANSISTOR	0	3	0	0	0	0	0	0	0
6 443 63-16 DO YOU CALCULATE THE SPECIFIC QUIESCENT POINT FOR A PARTICULAR TRANSISTOR	0	0	0	0	0	0	0	0	0
6 444 63-17 DO YOU MEASURE VOLTAGE GAIN USED IN THE COMMON EMITTER CONFIGURATION	1	3	1	0	0	1	0	0	0
6 445 63-18 DO YOU MEASURE CURRENT GAIN USED IN THE COMMON EMITTER CONFIGURATION	0	3	0	0	0	0	0	0	0
6 446 63-19 DO YOU MEASURE POWER GAIN USED IN THE COMMON EMITTER CONFIGURATION	0	3	0	0	0	0	0	0	0
6 447 63-20 DO YOU CALCULATE THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS USING A FORMULA THAT IS, DO YOU DIVIDE THE CHANGE IN VOLTAGE THAT IS, DO YOU DIVIDE THE CHANGE IN CURRENT THAT IS, DO YOU DIVIDE THE CHANGE IN POWER THAT IS, DO YOU DIVIDE THE CHANGE IN	0	0	0	0	0	0	0	0	0
6 448 63-21 DO YOU CALCULATE THE CURRENT GAIN FOR SPECIFIC TRANSISTORS USING A FORMULA THAT IS, DO YOU DIVIDE THE CHANGE IN VOLTAGE THAT IS, DO YOU DIVIDE THE CHANGE IN CURRENT THAT IS, DO YOU DIVIDE THE CHANGE IN POWER THAT IS, DO YOU DIVIDE THE CHANGE IN	0	0	0	0	0	0	0	0	0
6 449 63-22 DO YOU CALCULATE THE POWER GAIN FOR A SPECIFIC TRANSISTOR USING A FORMULA THAT IS, DO YOU MULTIPLY THE CHANGE IN VOLTAGE THAT IS, DO YOU MULTIPLY THE CHANGE IN CURRENT THAT IS, DO YOU MULTIPLY THE CHANGE IN POWER THAT IS, DO YOU MULTIPLY THE CHANGE IN	0	0	0	0	0	0	0	0	0
6 450 63-23 DO YOU NEED TO KNOW THAT MORE COLLECTOR CURRENT IS GENERATED WITH LESS COLLECTOR VOLTAGE AS TEMPERATURE GENERALLY INCREASES	0	0	0	0	0	0	0	0	0
6 451 63-24 DO YOU COMPUTE THE STATIC OPERATING POINT (Q) OF A TRANSISTOR AT DIFFERENT TEMPERATURES	0	0	0	0	0	0	0	0	0
6 452 63-25 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH THE ACTUAL CIRCUITRY	0	3	0	0	0	0	0	0	0
6 453 63-26 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH SELF-	0	3	0	0	0	0	0	0	0

PERCENT MEMBERS PERFORMING TASKS BY DAFSC GRPS

TASK GROUP SUMMARY

PERCENT MEMBERS PERFORMING

Task Description	SPL 027	SPL 028	SPL 029	SPL 030	SPL 031	SPL 041	SPL 042	SPL 043	SPL 044
6 454 63-27 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	0	3	0	0	0	0	0	0	0
6 455 63-28 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	0	3	0	0	0	0	0	0	0
6 456 63-29 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	0	3	0	0	0	0	0	0	0
6 457 63-30 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	0	3	0	0	0	0	0	0	0
6 458 63-31 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM EMITTER (SWAMPING) RESISTOR STABILIZATION	0	3	0	0	0	0	0	0	0
6 459 63-32 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM SELF-BIAS STABILIZATION	0	3	0	0	0	0	0	0	0
6 460 63-33 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM THERMISTOR STABILIZATION	0	3	0	0	0	0	0	0	0
6 461 63-34 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM FORWARD BIAS DIODE STABILIZATION	0	3	0	0	0	0	0	0	0
6 462 63-35 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM REVERSE BIAS DIODE STABILIZATION	0	3	0	0	0	0	0	0	0
6 463 63-36 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM DOUBLE DIODE STABILIZATION	0	3	0	0	0	0	0	0	0
6 464 63-37 DO YOU IDENTIFY AMPLITUDE DISTORTION FOR TRANSISTOR CIRCUITS	0	3	0	0	0	0	0	0	0
6 465 63-38 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF AMPLITUDE DISTORTION	0	0	0	0	0	0	0	0	0
6 466 63-39 DO YOU IDENTIFY FREQUENCY DISTORTION FOR TRANSISTOR CIRCUITS	0	3	0	0	0	0	0	0	0
6 467 63-40 DO YOU IDENTIFY PHASE DISTORTION FOR TRANSISTOR CIRCUITS	0	3	0	0	0	0	0	0	0
6 468 63-41 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF PHASE DISTORTION	0	0	0	0	0	0	0	0	0
6 469 63-42 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF FREQUENCY DISTORTION	0	0	0	0	0	0	0	0	0
6 470 63-43 DO YOU NEED TO KNOW THE DEGENERATIVE EFFECTS ON THE CIRCUIT CAUSED BY CHANGING EMITTER RESISTANCE FOR	0	3	0	0	0	0	0	0	0
6 471 63-44 DO YOU DETERMINE THE CLASS OF OPERATION FOR AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS	0	3	0	0	0	0	0	0	0
6 472 63-45 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS	0	3	0	0	0	0	0	0	0
6 473 63-46 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS	1	3	1	0	0	2	0	0	0
6 474 63-47 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRIC CIRCUITS	0	3	0	0	0	0	0	0	0
6 475 63-48 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS	0	3	0	0	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK											
	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
	027	028	029	030	031	041	042	043	044			
M 513 M3-02 DO YOU INSPECT OSCILLATORS	7	10	5	14	20	2	19	0	38			
M 514 M3-03 DO YOU ALIGN OR ADJUST OSCILLATORS	6	10	4	10	20	0	22	0	25			
M 515 M3-04 DO YOU REMOVE OR REPLACE COMPLETE OSCILLATORS	6	7	4	14	20	0	19	0	38			
M 516 M3-05 DO YOU REMOVE OR REPLACE OSCILLATOR COMPONENTS	3	3	1	10	20	0	4	0	25			OSCILLATORS
M 517 M3-06 DO YOU TROUBLESHOOT TO OSCILLATOR CIRCUIT LEVEL	4	3	2	14	20	0	11	0	38			
M 518 M3-07 DO YOU TROUBLESHOOT TO OSCILLATOR COMPONENTS	3	3	1	10	20	0	4	0	25			
M 519 M3-08 DO YOU USE OR REFER TO FEEDBACK	5	10	3	7	20	1	11	0	25			
M 520 M3-09 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)	2	7	1	3	0	0	7	0	13			
M 521 M3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY	4	10	1	7	20	1	4	0	25			
M 522 M3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY	4	10	1	10	20	1	4	0	38			
M 523 M3-12 DO YOU USE OR REFER TO DAMPING	4	10	2	3	20	0	11	0	13			
M 524 M3-13 DO YOU USE OR REFER TO REGENERATIVE FEEDBACK	2	7	1	7	0	0	4	0	25			
M 525 M3-14 DO YOU USE OR REFER TO PIEZOELECTRIC EFFECT	2	3	1	7	0	0	4	0	25			
M 526 M3-15 DO YOU USE OR REFER TO CRITICAL DAMPING	1	3	1	0	0	0	4	0	0			
M 527 M3-16 DO YOU USE OR REFER TO UNDER DAMPING	1	3	1	0	0	0	4	0	0			
M 528 M3-17 DO YOU USE OR REFER TO OVER DAMPING	1	3	1	0	0	0	4	0	0			
M 529 M3-18 DO YOU WORK WITH OSCILLATORS WHICH USE LC TANK CIRCUITS AS FDD	2	0	3	3	0	1	11	0	13			
M 530 M3-19 DO YOU WORK WITH OSCILLATORS WHICH USE RC NETWORKS AS FDD	2	0	3	3	0	1	11	0	13			
M 531 M3-20 DO YOU WORK WITH OSCILLATORS WHICH USE CRYSTALS AS FDD	3	0	3	10	0	1	11	0	25			
M 532 M3-21 DO YOU WORK WITH OSCILLATORS WHICH USE DON'T REMEMBER WHICH TYPE OF FDD	2	7	1	3	20	0	4	0	13			
M 533 M3-22 DO YOU WORK WITH SERIES HARTLEY SINUSOIDAL OSCILLATORS	0	0	1	0	0	0	4	0	0			
M 534 M3-23 DO YOU WORK WITH SHUNT HARTLEY SINUSOIDAL OSCILLATORS	0	0	1	0	0	0	4	0	0			
M 535 M3-24 DO YOU WORK WITH COLPITTS SINUSOIDAL OSCILLATORS	0	0	1	0	0	0	4	0	0			
M 536 M3-25 DO YOU WORK WITH CLAPP SINUSOIDAL OSCILLATORS	0	0	1	0	0	0	4	0	0			
M 537 M3-26 DO YOU WORK WITH BUTLER SINUSOIDAL OSCILLATORS	0	0	1	0	0	0	4	0	0			
M 538 M3-27 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE OF OSCILLATORS	4	3	2	14	20	0	11	0	38			
I 539 I1-01 DO YOU WORK WITH MULTIVIBRATORS IN YOUR PRESENT JOB	2	3	1	7	0	0	7	0	25			
I 540 I1-02 DO YOU INSPECT WAVE GENERATING OR SHAPING CIRCUITS	2	3	1	7	0	0	7	0	25			
I 541 I1-03 DO YOU ALIGN OR ADJUST WAVE GENERATING OR SHAPING CIRCUITS	2	3	1	7	0	0	7	0	25			MULTIVIBRATORS
I 542 I1-04 DO YOU CALIBRATE WAVE GENERATING OR SHAPING CIRCUITS	2	3	1	7	0	0	7	0	25			
I 543 I1-05 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUITS	2	3	1	7	0	0	7	0	25			
I 544 I1-06 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUIT COMPONENTS	2	3	1	7	0	0	7	0	25			
I 545 I1-07 DO YOU REMOVE OR REPLACE COMPLETE WAVE GENERATING OR SHAPING CIRCUITS	1	0	1	3	0	0	7	0	13			
I 546 I1-08 DO YOU REMOVE OR REPLACE WAVE GENERATING OR SHAPING COMPONENTS	2	0	1	7	0	0	7	0	25			
I 547 I1-09 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN LC TANK CIRCUITS	1	0	1	7	0	0	4	0	25			

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK											
	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
1 586 13-22 DO YOU CALCULATE ACTUAL VALUES OF TRIODE AMPLIFICATION FACTORS	027	028	029	030	031	041	042	043	044	045	046	047
1 587 13-23 DO YOU USE OR REFER TO MULTIGRID (TETRODE, PENTODE, ETC) AMPLIFICATION FACTORS	1	0	1	0	0	0	0	7	0	0	0	0
1 588 13-24 DO YOU USE OR REFER TO ELECTRON TUBE TRANSCONDUCTANCE (G, WHICH IS MEASURED IN MMOS)	2	3	1	3	0	0	0	7	0	13		
1 589 13-25 DO YOU CALCULATE ACTUAL VALUES OF ELECTRON TUBE TRANSCONDUCTANCES	1	3	1	0	0	0	0	4	0	0		
1 590 13-26 DO YOU USE OR REFER TO THE ELECTRON TUBE PARAMETER CALLED AC PLATE RESISTANCE	0	0	1	0	0	0	0	4	0	0		
1 591 13-27 DO YOU CALCULATE ACTUAL VALUES OF AC PLATE RESISTANCE	1	3	1	0	0	0	0	7	0	0		
1 592 13-28 DO YOU USE OR REFER TO ELECTRON TUBE INTERELECTRODE CAPACITANCE	1	0	1	0	0	0	0	7	0	0		
1 593 13-29 DO YOU USE OR REFER TO CHARACTERISTIC CURVES IN YOUR WORK WITH ELECTRON TUBES	2	3	1	3	0	0	0	7	0	13		
1 594 13-30 DO YOU USE CHARACTERISTIC CURVES TO SELECT PLATE VOLTAGE FOR A SPECIFIED BIAS	0	0	1	0	0	0	0	4	0	0		
1 595 13-31 DO YOU USE CHARACTERISTIC CURVES TO SELECT PLATE CURRENT FOR A SPECIFIED BIAS	0	0	1	0	0	0	0	4	0	0		
1 596 13-32 DO YOU USE CHARACTERISTIC CURVES TO SELECT BIAS REQUIRED FOR CUTOFF	0	0	1	0	0	0	0	4	0	0		
1 597 13-33 DO YOU USE CHARACTERISTIC CURVES TO SELECT BIAS REQUIRED FOR SATURATION	0	0	1	0	0	0	0	4	0	0		
1 598 13-34 DO YOU USE OR REFER TO ELECTRON TUBE AMPLIFIER GAIN EFFICIENCY	4	7	3	7	0	0	15	0	25			
1 599 13-35 DO YOU USE OR REFER TO ELECTRON TUBE AMPLIFIER TUBE AMPLIFIER GAIN	3	7	2	3	0	0	11	0	13			
1 600 13-36 DO YOU USE TEST TUBE CHECKERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	4	3	3	14	0	0	15	5	38			
1 601 13-37 DO YOU USE MULTIMETERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	3	3	3	7	0	0	15	0	25			
1 602 13-38 DO YOU USE OSCILLOSCOPES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	4	7	3	7	0	1	11	0	25			
1 603 13-39 DO YOU USE CHARACTERISTIC CURVES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	2	3	1	3	0	0	7	0	13			
1 604 13-40 DO YOU CALCULATE ANY ELECTRON TUBE CAPACITANCES SUCH AS INPUT CAPACITANCE	1	0	1	3	0	0	4	0	13			
1 605 13-41 DO YOU USE OR REFER TO TUBE SOCKET NOTATION	6	7	4	17	0	0	22	5	38			
1 606 13-42 DO YOU USE OR REFER TO PIN NUMBERING SYSTEMS	7	7	5	21	0	0	26	5	50			
1 607 13-43 DO YOU USE OR REFER TO THE TYPE OF MATERIAL OR THE OPERATING TEMPERATURE OF THE EMITTING SURFACE IN THE TUBE	2	3	1	3	0	0	7	0	13			
1 608 13-44 DO YOU USE OR REFER TO TUBE SUBSTITUTION MATERIAL SUCH AS MANUALS OR CHARTS	5	7	2	21	0	0	11	5	50			
J 609 J1-01 DO YOU WORK WITH ELECTRON TUBE AMPLIFIERS OR CIRCUITS IN YOUR PRESENT JOB	4	3	3	10	0	0	15	0	25			
J 610 J1-02 DO YOU DETERMINE THE CLASS OF OPERATION FOR ELECTRON TUBE AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER	3	0	3	7	0	0	15	0	13			
											ELECTRON TUBE AMPLIFIERS AND CIRCUITS	

PERCENT MEMBERS PERFORMING TASKS BY DAFSC GRPS

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TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK		SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
		027	028	029	030	031	041	042	043	044
J 611	J1-03 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS	2	0	2	7	0	0	11	0	13
J 612	J1-04 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS	3	0	2	10	0	0	11	0	25
J 613	J1-05 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS	1	0	1	7	0	0	4	0	25
J 614	J1-06 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS	1	0	1	7	0	0	4	0	25
J 615	J1-07 DO YOU TROUBLESHOOT OR REPAIR DON'T KNOW WHICH TYPE OF AMPLIFIER	1	3	1	0	0	0	7	0	0
J 616	J2-01 DO YOU WORK WITH GAS TUBES (HOT CATHODE OR COLD CATHODE)	6	3	6	10	0	2	22	0	25
J 617	J2-02 DO YOU WORK WITH CATHODE-RAY TUBES	7	10	7	7	0	2	30	0	25
J 618	J2-03 DO YOU USE OR REFER TO THE CHARACTERISTICS OF BEAM POWER TUBES	2	3	1	3	0	0	7	0	13
J 619	J2-04 DO YOU TROUBLESHOOT OR REPAIR CIRCUITS IN WHICH BEAM POWER TUBES ARE USED	2	0	2	3	0	0	11	0	13
J 620	J2-05 DO YOU USE OR REFER TO THE CHARACTERISTICS OF THERATONS	2	3	2	3	0	0	11	0	13
J 621	J2-06 DO YOU TROUBLESHOOT OR REPAIR CIRCUITS IN WHICH THERATONS ARE USED	2	0	3	3	0	0	15	0	13
J 622	J2-07 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRON GUNS OF CATHODE-RAY TUBES (CRT)	4	7	4	3	0	1	15	0	13
J 623	J2-08 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROMAGNETIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES	3	7	2	3	0	0	11	0	13
J 624	J2-09 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROSTATIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES	3	7	3	3	0	0	15	0	13
J 625	J2-10 DO YOU USE OR REFER TO PHOSPHOR SCREENS	3	3	2	7	0	0	11	0	13
J 626	J2-11 DO YOU USE OR REFER TO AQUADAG COATINGS	2	3	2	3	0	0	11	0	13
J 627	J2-12 DO YOU USE OR REFER TO ELECTRON OPTICS	1	3	1	0	0	0	7	0	0
J 628	J2-13 DO YOU USE OR REFER TO PERSISTENCE	2	3	1	3	0	0	7	0	13
J 629	J2-14 DO YOU USE OR REFER TO DECAY TIMES	2	3	1	3	0	0	7	0	13
J 630	J2-15 DO YOU USE OR REFER TO FLUORESCENCE	2	7	1	3	0	0	9	0	13
J 631	J2-16 DO YOU USE OR REFER TO PHOSPHORESCENCE	2	7	1	3	0	0	7	0	13
J 632	J3-01 DO YOU WORK ON TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	7	0	9	7	0	4	26	0	25
J 633	J3-02 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS	4	0	5	7	0	0	26	0	25
J 634	J3-03 DO YOU PERFORM TASKS ON FREQUENCY MIXERS	4	0	4	7	0	0	22	0	25
J 635	J3-04 DO YOU USE OR REFER TO THE HETERODYNING OF SIGNALS IN YOUR WORK WITH TRANSMIT OR RECEIVE SYSTEMS	2	0	3	3	0	0	15	0	13
J 636	J3-05 DO YOU PERFORM TASKS ON REACTANCE MODULATORS	2	0	2	3	0	0	11	0	13
J 637	J3-06 DO YOU PERFORM TASKS ON MODULATED OSCILLATORS	3	0	4	3	0	0	19	0	13
J 638	K1-01 DO YOU WORK ON AM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	1	0	1	7	0	0	4	0	25
K 639	K1-02 DO YOU INSPECT AM TRANSMIT OR RECEIVE SYSTEMS	1	0	1	3	0	0	7	0	13
K 640	K1-03 DO YOU CLEAN AM TRANSMIT OR RECEIVE SYSTEMS	1	0	1	3	0	0	4	0	13
K 641	K1-04 DO YOU ALIGN OR ADJUST AM TRANSMIT OR RECEIVE SYSTEMS	1	0	1	7	0	0	4	0	25

HETERODYNING,
MODULATION, AND
DEMODULATION

AM SYSTEMS

SPECIAL PURPOSE
ELECTRON TUBES

TASK GROUP SUMMARY

[illegible]

PERCENT MEMBERS PERFORMING TASKS BY DAFSC GRPS

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TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK											
		SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
		027	028	029	030	031	041	042	043	044	045	046	047
K 676 K2-11 DO YOU PERFORM TASKS ON DRIVERS (INTERMEDIATE AMPLIFIERS)													
		0	0	1	0	0	0	0	4	0	0	0	0
K 677 K2-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS													
		0	0	1	0	0	0	0	4	0	0	0	0
K 678 K2-13 DO YOU PERFORM TASKS ON RF AMPLIFIERS													
		0	0	1	0	0	0	0	4	0	0	0	0
K 679 K2-14 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS													
		0	0	1	0	0	0	0	4	0	0	0	0
K 680 K2-15 DO YOU PERFORM TASKS ON IF AMPLIFIERS													
		0	0	1	0	0	0	0	4	0	0	0	0
K 681 K2-16 DO YOU PERFORM TASKS ON LIMITERS													
		0	0	1	0	0	0	0	4	0	0	0	0
K 682 K2-17 DO YOU PERFORM TASKS ON FREQUENCY DISCRIMINATORS													
		0	0	1	0	0	0	0	4	0	0	0	0
K 683 K2-18 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSMITTERS													
		1	0	2	0	0	1	7	0	0	0	0	0
K 684 K2-19 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM RECEIVERS													
		0	0	1	0	0	0	0	4	0	0	0	0
K 685 K3-01 DO YOU CONVERT DECIMAL (BASE 10) NUMBERS TO OCTAL (BASE 8) NUMBERS													
		1	10	0	0	0	0	0	0	0	0	0	0
K 686 K3-02 DO YOU CONVERT DECIMAL NUMBERS TO BINARY (BASE 2) NUMBERS													
		1	10	0	0	0	0	0	0	0	0	0	0
K 687 K3-03 DO YOU CONVERT OCTAL NUMBERS TO DECIMAL NUMBERS													
		0	3	0	0	0	0	0	0	0	0	0	0
K 688 K3-04 DO YOU CONVERT OCTAL NUMBERS TO BINARY NUMBERS													
		0	3	0	0	0	0	0	0	0	0	0	0
K 689 K3-05 DO YOU CONVERT BINARY NUMBERS TO DECIMAL NUMBERS													
		1	7	1	0	0	1	0	0	0	0	0	0
K 690 K3-06 DO YOU CONVERT BINARY NUMBERS TO OCTAL NUMBERS													
		0	3	0	0	0	0	0	0	0	0	0	0
K 691 K3-07 DO YOU ADD BINARY NUMBERS TO GET A SUM													
		2	7	2	0	0	3	0	0	0	0	0	0
K 692 K3-08 DO YOU SUBTRACT BINARY NUMBERS USING THE END-AROUND-CARRY METHOD													
		1	3	1	0	0	1	0	0	0	0	0	0
K 693 K3-09 DO YOU SUBTRACT BINARY NUMBERS USING THE DIRECT SUBTRACTION METHOD													
		2	7	2	0	0	3	0	0	0	0	0	0
K 694 K3-10 DO YOU ADD OCTAL NUMBERS TO GET A SUM													
		1	3	1	0	0	1	0	0	0	0	0	0
K 695 K3-11 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO LOGIC FUNCTIONS													
		4	3	4	7	0	6	0	10	0	0	0	0
L 696 L1-02 DO YOU CONSTRUCT TRUTH TABLES FOR AND LOGIC SYMBOLS													
		3	3	3	3	0	4	0	5	0	0	0	0
L 697 L1-03 DO YOU CONSTRUCT TRUTH TABLES FOR OR LOGIC SYMBOLS													
		2	3	2	3	0	3	0	5	0	0	0	0
L 698 L1-04 DO YOU CONSTRUCT TRUTH TABLES FOR AND OR OR LOGIC SYMBOLS WITH STATE INDICATORS													
		2	3	2	3	0	3	0	5	0	0	0	0
L 699 L1-05 DO YOU CONSTRUCT TRUTH TABLES FOR EXCLUSIVE OR LOGIC SYMBOLS OR GATES													
		2	3	2	3	0	3	0	5	0	0	0	0
L 700 L1-06 DO YOU USE OR REFER TO TRUTH TABLES FOR AND LOGIC SYMBOLS OR GATES													
		4	3	4	7	0	5	0	10	0	0	0	0
L 701 K1-07 DO YOU USE OR REFER TO TRUTH TABLES FOR OR LOGIC SYMBOLS OR GATES													
		4	3	4	7	0	5	0	10	0	0	0	0
L 702 K1-08 DO YOU USE OR REFER TO TRUTH TABLES FOR AND OR OR LOGIC SYMBOLS OR GATES													
		4	3	4	7	0	5	0	10	0	0	0	0
L 703 L1-09 DO YOU USE OR REFER TO TRUTH TABLES FOR EXCLUSIVE OR LOGIC SYMBOLS													
		3	3	3	7	0	4	0	10	0	0	0	0
L 704 L1-10 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR AND GATES													
		4	3	4	7	0	6	0	10	0	0	0	0
L 705 L1-11 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR OR GATES													
		4	3	4	7	0	6	0	10	0	0	0	0
L 706 L1-12 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR NAND OR NOR GATES													
		4	3	4	7	0	6	0	10	0	0	0	0

NUMBERING
SYSTEMS

LOGIC FUNCTIONS

PERCENT MEMBERS PERFORMING

0Y-75K

	SPL 027	SPL 028	SPL 029	SPL 030	SPL 031	SPL 041	SPL 042	SPL 043	SPL 044
L 707 L1-13 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR EXCLUSIVE OR GATES	4	3	4	7	0	5	0	10	0
L 708 L2-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO BOOLEAN EQUATIONS, LOGIC DIAGRAMS, OR LOGIC	2	7	1	0	0	2	0	0	0
L 709 L2-02 DO YOU DRAW LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUITS	1	3	1	0	0	1	0	0	0
L 710 L2-03 DO YOU CONSTRUCT TRUTH TABLES FOR CURRENT MODE LOGIC (CNL) CIRCUITS	1	3	1	0	0	2	0	0	0
L 711 L2-04 DO YOU DRAW LOGIC DIAGRAMS FROM GIVEN BOOLEAN EQUATIONS	1	3	1	0	0	1	0	0	0
L 712 L2-05 DO YOU MEASURE INPUTS OR OUTPUTS OF LOGIC GATES	1	3	1	0	0	2	0	0	0
L 713 L2-06 DO YOU DEVELOP OR ANALYZE BOOLEAN EQUATIONS IN THE PROCESS OF TROUBLESHOOTING DIGITAL CIRCUITS	0	0	0	0	0	0	0	0	0
L 714 L2-07 DO YOU ANALYZE LOGIC CIRCUITS BY USING BOOLEAN ALGEBRA	0	3	0	0	0	0	0	0	0
L 715 L2-08 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUIT GATES	0	3	0	0	0	0	0	0	0
L 716 L2-09 DO YOU USE OR REFER TO TRUTH TABLES FOR CURRENT MODE LOGIC (CNL) CIRCUITS	0	3	0	0	0	0	0	0	0
L 717 L2-10 DO YOU USE OR REFER TO LOGIC DIAGRAMS CONSISTING OF MORE THAN ONE GATE	1	3	1	0	0	1	0	0	0
L 718 L2-11 DO YOU COMPUTE SUM AND CARRY EXPRESSIONS FOR SERIAL HALF OR FULL ADDER LOGIC DIAGRAMS	0	0	0	0	0	0	0	0	0
L 719 L2-12 DO YOU TRACE DATA FLOW THROUGH PARALLEL FULL ADDER LOGIC DIAGRAMS	0	0	0	0	0	0	0	0	0
L 720 L2-13 DO YOU WORK WITH ASTABLE (FREE RUNNING) MULTIVIBRATORS	0	3	0	0	0	0	0	0	0
L 721 L2-14 DO YOU WORK WITH BISTABLE (FLIP-FLOP) MULTIVIBRATORS	0	3	0	0	0	0	0	0	0
L 722 L2-15 DO YOU WORK WITH MONOSTABLE (ONE-SHOT) MULTIVIBRATORS	0	3	0	0	0	0	0	0	0
L 723 L2-16 DO YOU USE OR REFER TO FLIP-FLOP MULTIVIBRATOR SYMBOLS	0	3	0	0	0	0	0	0	0
L 724 L2-17 DO YOU USE OR REFER TO SINGLE-SHOT MULTIVIBRATOR SYMBOLS	0	3	0	0	0	0	0	0	0
L 725 L2-18 DO YOU USE OR REFER TO FLIP-FLOP CIRCUIT DIAGRAMS	1	3	1	0	0	1	0	0	0
L 726 L2-19 DO YOU USE OR REFER TO FLIP-FLOP TRUTH TABLES	1	3	1	0	0	1	0	0	0
L 727 L2-20 DO YOU USE OR REFER TO COMPLEMENTED FLIP-FLOP LOGIC SYMBOLS	1	3	1	0	0	1	0	0	0
L 728 L2-21 DO YOU USE OR REFER TO COMPLEMENTING FLIP-FLOP LOGIC SYMBOLS	0	3	0	0	0	0	0	0	0
L 729 L2-22 DO YOU MEASURE OUTPUT WAVESHAPES OF LOGIC CIRCUITS	0	0	0	0	0	0	0	0	0
L 730 L2-23 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTED FLIP-FLOP SCHEMATIC DIAGRAMS	0	0	0	0	0	0	0	0	0
L 731 L2-24 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS	0	0	0	0	0	0	0	0	0
L 732 L2-25 DO YOU CONSTRUCT TRUTH TABLES FOR J-K FLIP-FLOP LOGIC SYMBOLS	1	3	1	0	0	1	0	0	0

PERCENT MEMBERS PERFORMING TASKS BY DAFSC GRPS

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TASK	GROUP SUMMARY	PERCENT MEMBERS PERFORMING
1. Identify the problem	100%	100%
2. Generate hypotheses	100%	100%
3. Test hypotheses	100%	100%
4. Evaluate results	100%	100%
5. Draw conclusions	100%	100%
6. Communicate results	100%	100%
7. Reflect on the process	100%	100%
8. Apply the results	100%	100%
9. Evaluate the group's performance	100%	100%
10. Summarize the findings	100%	100%

0Y-TSK

[illegible]

TASK GROUP 300000
PERCENT MEMBERS PERFORMING

[illegible]

TASK	GROUP SUMMARY	PERCENT MEMBERS PERFORMING
1. Identify the problem	100%	100%
2. Generate ideas	100%	100%
3. Evaluate ideas	100%	100%
4. Select a solution	100%	100%
5. Implement the solution	100%	100%
6. Evaluate the results	100%	100%

	OY-TSK	SPL 027	SPL 028	SPL 029	SPL 030	SPL 031	SPL 041	SPL 042	SPL 043	SPL 044
M 794 M3-16 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OF THE FORCE OR TORQUE CREATED BY A MOTOR	0	0	0	0	0	0	0	0	0	0
M 795 M3-17 DO YOU DETERMINE OR MEASURE THE DIRECTION OF THE MECHANICAL FORCE OR TORQUE CREATED BY A MOTOR	0	0	0	3	0	0	0	0	0	1
M 796 M3-18 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OR DIRECTION OF THE INDUCED VOLTAGE IN MOTORS	0	0	0	0	0	0	0	0	0	0
M 797 M3-19 DO YOU WORK WITH SYNCHRONOUS MOTORS	2	0	1	7	0	1	4	0	0	25
M 798 M3-20 DO YOU WORK WITH INDUCTION MOTORS	3	0	3	7	0	3	4	0	0	25
M 799 M3-21 DO YOU WORK WITH SPLIT-PHASE MOTORS	2	0	2	3	0	1	7	0	13	
M 800 M3-22 DO YOU WORK WITH SOME COMBINATION OF THE ABOVE MOTORS	3	0	4	7	0	3	7	0	13	
M 801 M3-23 DO YOU INSPECT GENERATORS	14	13	16	7	0	17	11	5	13	
M 802 M3-24 DO YOU CLEAN OR LUBRICATE GENERATORS	6	7	7	3	0	6	11	0	13	
M 803 M3-25 DO YOU OPERATE GENERATORS	15	13	18	10	0	19	11	5	13	
M 804 M3-26 DO YOU REMOVE OR REPLACE COMPLETE GENERATORS	3	3	4	3	0	3	7	0	13	
M 805 M3-27 DO YOU REMOVE OR REPLACE GENERATOR PARTS	2	3	2	0	0	1	7	0	0	
M 806 M3-28 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF GENERATORS	3	3	4	3	0	2	7	0	13	
M 807 M3-29 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF GENERATORS	2	3	2	0	0	0	11	0	0	
M 808 M1-01 DO YOU WORK WITH METERS IN YOUR PRESENT JOB	51	57	53	41	20	51	59	45	38	
M 809 M1-02 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF PERMANENT MAGNETS	11	20	10	7	0	12	0	0	13	
M 810 M1-03 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF MOVING COILS	11	20	10	3	0	13	0	0	13	
M 811 M1-04 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF SPIRAL SPRINGS	11	23	10	3	0	12	0	0	13	
M 812 M1-05 DO YOU READ METER SCALES	50	63	50	41	20	49	56	45	38	
M 813 M1-06 DO YOU EXTEND THE RANGE OF AMMETERS	14	20	15	7	0	15	15	10	0	
M 814 M1-07 DO YOU ZERO OHMMETERS	50	60	51	41	20	49	59	45	38	
M 815 M1-08 DO YOU ZERO AMMETERS	24	33	25	14	0	24	26	10	25	
M 816 M1-09 DO YOU EXTEND THE RANGE OF VOLTMETERS	22	17	26	7	0	25	30	5	13	
M 817 M1-10 DO YOU USE OR REFER TO VOLTMETER SENSITIVITY EXPRESSED IN UNITS OF OHMS PER VOLT	15	20	13	21	20	10	19	10	38	
M 818 M2-01 DO YOU WORK WITH SATURABLE REACTORS OR MAGNETIC AMPLIFIERS IN YOUR PRESENT JOB	0	0	1	0	0	1	0	0	0	
M 819 M2-02 DO YOU INSPECT MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	0	0	0	0	
M 820 M2-03 DO YOU CLEAN MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	0	0	0	0	
M 821 M2-04 DO YOU ADJUST MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	0	0	0	0	
M 822 M2-05 DO YOU TROUBLESHOOT MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	0	0	0	0	
M 823 M2-06 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	0	0	0	0	
M 824 M2-07 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIER OR SATURABLE REACTOR COMPONENTS	0	0	0	0	0	0	0	0	0	

SATURABLE REACTORS AND MAGNETIC AMPLIFIERS

TASK GROUP SUMMARY

PERCENT MEMBERS PERFORMING

0Y-TSK																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	S

SINGLE SIDEBAND
SYSTEMSWAVESHAPING
CIRCUITS

PERCENT MEMBERS PERFORMING TASKS BY DAFSC GRPS

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TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		0Y-TSK													SPL																						
															027	028	029	030	031	041	042	043	044	045	046	047	048										
0 853 01-09 DO YOU PERFORM TASKS ON SSB AUDIO AMPLIFIERS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
0 854 01-10 DO YOU PERFORM TASKS ON SSB BALANCED MODULATORS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
0 855 01-11 DO YOU PERFORM TASKS ON SSB CARRIER OSCILLATORS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
0 856 01-12 DO YOU PERFORM TASKS ON SSB LC FILTERS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
0 857 01-13 DO YOU PERFORM TASKS ON SSB CRYSTAL FILTERS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
0 858 01-14 DO YOU PERFORM TASKS ON SSB MECHANICAL FILTERS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
0 859 01-15 DO YOU PERFORM TASKS ON SSB OSCILLATORS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
0 860 01-16 DO YOU PERFORM TASKS ON SSB MIXERS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
0 861 01-17 DO YOU PERFORM TASKS ON SSB DRIVERS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
0 862 01-18 DO YOU PERFORM TASKS ON SSB POWER AMPLIFIERS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
0 863 01-19 DO YOU PERFORM TASKS ON SSB RF AMPLIFIERS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
0 864 01-20 DO YOU PERFORM TASKS ON SSB FREQUENCY CONVERTERS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
0 865 01-21 DO YOU PERFORM TASKS ON SSB IF AMPLIFIERS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
0 866 01-22 DO YOU PERFORM TASKS ON SSB DEMODULATORS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
0 867 01-23 DO YOU PERFORM TASKS ON SSB DON'T REMEMBER WHICH SSB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
SYSTEM STAGES																																					
0 868 01-24 DO YOU USE OR REFER TO SELECTIVE FADING		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
0 869 01-25 DO YOU USE OR REFER TO PEAK POWER		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
0 870 01-26 DO YOU USE OR REFER TO FREQUENCY STABILITY		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
0 871 01-27 DO YOU USE OR REFER TO RESPONSE CURVES FOR		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
BANDWIDTH FILTERS																																					
0 872 01-28 DO YOU CALCULATE PEAK POWER OR EFFECTIVE POWER OF SSB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
TRANSMITTERS																																					
0 873 01-29 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
TRANSMITTER SCHEMATIC DIAGRAMS																																					
0 874 01-30 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
RECEIVER SCHEMATIC DIAGRAMS																																					
0 875 02-01 DO YOU WORK ON PULSE MODULATION SYSTEMS IN YOUR		1	0	1	7	0	0	0	4	0	0	0	0	0	25																						
PRESENT JOB																																					
0 876 02-02 DO YOU INSPECT PULSE MODULATION SYSTEMS		1	0	0	7	0	0	0	0	0	0	0	0	0	25	PULSE MODULATION SYSTEMS																					
0 877 02-03 DO YOU CLEAN PULSE MODULATION SYSTEMS		0	0	0	3	0	0	0	0	0	0	0	0	13																							
0 878 02-04 DO YOU ALIGN PULSE MODULATION SYSTEMS		1	0	1	3	0	0	0	4	0	0	0	0	13																							
0 879 02-05 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEMS		1	0	0	7	0	0	0	0	0	0	0	0	25																							
0 880 02-06 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEM		1	0	0	7	0	0	0	0	0	0	0	0	25																							
COMMENTS																																					
0 881 02-07 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEMS		1	0	1	3	0	0	0	4	0	0	0	0	13																							
0 882 02-08 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEM		1	0	0	7	0	0	0	0	0	0	0	0	25																							
COMMENTS																																					
0 883 02-09 DO YOU WORK ON PULSE-AMPLITUDE MODULATION (PAM)		0	0	0	3	0	0	0	0	0	0	0	0	13																							
SYSTEMS																																					
0 884 02-10 DO YOU WORK ON PULSE-DURATION MODULATION (PDM)		0	0	0	0	0	0	0	0	0	0	0	0	0																							
SYSTEMS																																					
0 885 02-11 DO YOU WORK ON PULSE-POSITION MODULATION (PPM)		0	0	0	0	0	0	0	0	0	0	0	0	0																							
SYSTEMS																																					
0 886 02-12 DO YOU WORK ON PULSE-CODE MODULATION (PCM) SYSTEMS		0	0	0	0	0	0	0	0	0	0	0	0	0																							
0 887 02-13 DO YOU WORK ON LINE PULSING MODULATION SYSTEMS		0	0	0	0	0	0	0	0	0	0	0	0	0																							
0 888 02-14 DO YOU WORK ON DON'T REMEMBER WHICH TYPE OF		0	0	0	0	0	0	0	0	0	0	0	0	0	MODULATION SYSTEM																						
MODULATION SYSTEM																																					

PULSE MODULATION
SYSTEMS

PERCENT MEMBERS PERFORMING TASKS BY DAFSC GRPS

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TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING

DY-TSK	SPL											
	027	028	029	030	031	041	042	043	044	SPL	SPL	SPL
0 889 02-15 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	1	0	1	3	0	0	7	0	13			
POWER SUPPLIES												
0 890 02-16 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	0	0	0	3	0	0	0	0	13			
CHARGING CHOKES AND CHARGING DIODES												
0 891 02-17 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	0	0	0	3	0	0	0	0	13			
PULSE FORMING NETWORKS												
0 892 02-18 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	0	0	0	0	0	0	0	0	0			
TIMERS												
0 893 02-19 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	1	0	0	7	0	0	0	0	25			
SWITCHES SUCH AS GAS THYRATONS												
0 894 02-20 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	1	0	0	7	0	0	0	0	25			
PULSE TRANSFORMERS												
0 895 02-21 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	0	0	0	3	0	0	0	0	13			
TRANSMITTER TUBES												
0 896 02-22 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM RF	1	0	0	7	0	0	0	0	25			
AMPLIFIERS												
0 897 02-23 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	1	0	0	7	0	0	0	0	25			
FREQUENCY CONVERTERS												
0 898 02-24 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	1	0	0	7	0	0	0	0	25			
IF AMPLIFIERS												
0 899 02-25 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	1	0	0	7	0	0	0	0	25			
DETECTORS												
0 900 02-26 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	1	0	0	7	0	0	0	0	25			
VIDEO AMPLIFIERS												
0 901 02-27 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	0	0	0	3	0	0	0	0	13			
POWER VIDEO AMPLIFIERS												
0 902 02-28 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	0	0	0	0	0	0	0	0	0			
DON'T REMEMBER WHICH PULSE MODULATION SYSTEM STAGES												
0 903 02-29 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY	1	0	0	7	0	0	0	0	25			
(PRF)												
0 904 02-30 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)	0	0	0	3	0	0	0	0	13			
0 905 02-31 DO YOU USE OR REFER TO PULSE WIDTH (PW)	1	0	0	7	0	0	0	0	25			
0 906 02-32 DO YOU USE OR REFER TO PULSE SHAPE	1	0	0	7	0	0	0	0	25			
0 907 02-33 DO YOU USE OR REFER TO PEAK POWER	1	0	1	7	0	0	4	0	25			
0 908 02-34 DO YOU USE OR REFER TO AVERAGE POWER	1	0	0	7	0	0	0	0	25			
0 909 02-35 DO YOU CALCULATE PULSE RECURRENCE TIME (PRT) OR PULSE	0	0	0	3	0	0	0	0	13			
RECURRENCE FREQUENCY (PRF)												
0 910 02-36 DO YOU MEASURE PULSE RECURRENCE TIME (PRT) OR PULSE	0	0	0	3	0	0	0	0	13			
RECURRENCE FREQUENCY (PRF)												
0 911 02-37 DO YOU USE FORMULAS TO CALCULATE AVERAGE POWER OR	0	0	0	0	0	0	0	0	0			
PEAK POWER OF PULSE MODULATION TRANSMIT SYSTEMS												
0 912 02-38 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE	1	0	0	7	0	0	0	0	25			
MODULATION TRANSMITTER SCHEMATIC DIAGRAMS												
0 913 02-39 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE	1	0	0	7	0	0	0	0	25			
MODULATION RECEIVER SCHEMATIC DIAGRAMS												
0 914 03-01 DO YOU WORK WITH ANTENNAS IN YOUR PRESENT JOB	27	20	33	10	0	36	22	5	25			
0 915 03-02 DO YOU INSPECT ANTENNAS	24	20	29	7	0	33	15	5	13			

ANTENNAS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

[illegible]

TASK GROUP SUMMARY

[illegible]

PERCENT MEMBERS PERFORMING TASKS BY DAFSC GRPS

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TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	SPL 027	SPL 028	SPL 029	SPL 030	SPL 031	SPL 041	SPL 042	SPL 043	SPL 044
DY-TSK									
P1059 P3-26 DO YOU TUNE PARAMETRIC AMPLIFIERS	0	0	0	0	0	0	0	0	0
P1060 P3-27 DO YOU PERFORM OPERATIONAL CHECKS OF PARAMETRIC AMPLIFIERS	0	0	0	0	0	0	0	0	0
P1061 P3-28 DO YOU TROUBLESHOOT PARAMETRIC AMPLIFIERS	0	0	0	0	0	0	0	0	0
P1062 P3-29 DO YOU REMOVE OR REPLACE COMPLETE PARAMETRIC AMPLIFIER	0	0	0	0	0	0	0	0	0
P1063 P3-30 DO YOU REMOVE OR REPLACE PARAMETRIC AMPLIFIER COMPONENTS	0	0	0	0	0	0	0	0	0
P1064 P3-31 DO YOU INSPECT MAGNETRONS	0	0	0	0	0	0	0	0	0
P1065 P3-32 DO YOU CLEAN MAGNETRONS	0	0	0	0	0	0	0	0	0
P1066 P3-33 DO YOU ADJUST MAGNETRONS	0	0	0	0	0	0	0	0	0
P1067 P3-34 DO YOU TUNE MAGNETRONS	0	0	0	0	0	0	0	0	0
P1068 P3-35 DO YOU PERFORM OPERATIONAL CHECKS OF MAGNETRONS	0	0	0	0	0	0	0	0	0
P1069 P3-36 DO YOU TROUBLESHOOT MAGNETRONS	0	0	0	0	0	0	0	0	0
P1070 P3-37 DO YOU REMOVE OR REPLACE COMPLETE MAGNETRON	0	0	0	0	0	0	0	0	0
P1071 P3-38 DO YOU REMOVE OR REPLACE MAGNETRON COMPONENTS	0	0	0	0	0	0	0	0	0
P1072 P3-39 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS COLLECTOR PLATES	0	0	0	0	0	0	0	0	0
P1073 P3-40 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATCHER CAVITIES	0	0	0	0	0	0	0	0	0
P1074 P3-41 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATCHER GRIDS	0	0	0	0	0	0	0	0	0
P1075 P3-42 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS FEEDBACK LOOPS	0	0	0	0	0	0	0	0	0
P1076 P3-43 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS DRIFT SPACES	0	0	0	0	0	0	0	0	0
P1077 P3-44 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS BUNCHER GRIDS	0	0	0	0	0	0	0	0	0
P1078 P3-45 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS BUNCHER CAVITIES	0	0	0	0	0	0	0	0	0
P1079 P3-46 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CONTROL GRIDS	0	0	0	0	0	0	0	0	0
P1080 P3-47 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATHODES	0	0	0	0	0	0	0	0	0
P1081 P3-48 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON REFLECTOR (REFLECTOR) PLATES	1	0	1	7	0	0	4	0	13
P1082 P3-49 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON GRIDS	1	0	1	3	0	0	4	0	0
P1083 P3-50 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON GRID CAVITY GAPS	1	0	1	3	0	0	4	0	0
P1084 P3-51 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON RESONANT CAVITIES	1	0	1	7	0	0	4	0	13
P1085 P3-52 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON MAGNETIC COUPLING LOOPS	0	0	1	0	0	0	4	0	0
P1086 P3-53 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON FILAMENTS	1	0	1	3	0	0	4	0	0
P1087 P3-54 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON CATHODES	1	0	1	3	0	0	4	0	0

PERCENT MEMBERS PERFORMING TASKS BY DAFSC GRPS

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TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	027	028	029	030	031	041	042	043	044
P1088 P3-55 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON OUTPUT LEADS	2	3	1	3	0	0	7	0	0
P1089 P3-56 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES FILAMENTS	0	0	1	0	0	0	4	0	0
P1090 P3-57 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES CATHODES	0	0	1	0	0	0	4	0	0
P1091 P3-58 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES MODULATOR GRIDS	0	0	1	0	0	0	4	0	0
P1092 P3-59 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES ANODES	0	0	1	0	0	0	4	0	0
P1093 P3-60 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES HELICES	0	0	1	0	0	0	4	0	0
P1094 P3-61 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES COLLECTORS	0	0	1	0	0	0	4	0	0
P1095 P3-62 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES MAGNETS	0	0	0	0	0	0	0	0	0
P1096 P3-63 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES ATTENUATORS	0	0	1	0	0	0	4	0	0
P1097 P3-64 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER FERRITE CIRCULATORS	0	0	0	0	0	0	0	0	0
P1098 P3-65 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER SIGNAL CAVITIES	0	0	0	0	0	0	0	0	0
P1099 P3-66 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER IDLER CAVITIES	0	0	0	0	0	0	0	0	0
P1100 P3-67 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER VARACTOR DIODES	0	0	0	0	0	0	0	0	0
P1101 P3-68 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER FERRITE ISOLATORS	0	0	0	0	0	0	0	0	0
P1102 P3-69 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER REVERSE-BIAS BATTERIES	0	0	0	0	0	0	0	0	0
P1103 P3-70 DO YOU PERFORM TASKS ON ANODES	0	0	0	0	0	0	0	0	0
P1104 P3-71 DO YOU PERFORM TASKS ON ANODE COOLING PINS	0	0	0	0	0	0	0	0	0
P1105 P3-72 DO YOU PERFORM TASKS ON COUPLING LOOPS	0	0	0	0	0	0	0	0	0
P1106 P3-73 DO YOU PERFORM TASKS ON HEATER LEADS	0	0	0	0	0	0	0	0	0
P1107 P3-74 DO YOU PERFORM TASKS ON RESONANT CAVITIES	0	0	0	0	0	0	0	0	0
P1108 P3-75 DO YOU PERFORM TASKS ON CATHODES	0	0	0	0	0	0	0	0	0
P1109 P3-76 DO YOU PERFORM TASKS ON MAGNETS	0	0	0	0	0	0	0	0	0
Q1110 Q1-01 DO YOU USE OR REFER TO STORAGE REGISTERS	0	3	0	0	0	0	0	0	0
Q1111 Q1-02 DO YOU USE OR REFER TO SHIFT REGISTERS	0	3	0	0	0	0	0	0	0
Q1112 Q1-03 DO YOU USE OR REFER TO LOGIC SYMBOLS OF SHIFT REGISTERS	0	3	0	0	0	0	0	0	0
Q1113 Q1-04 DO YOU USE OR REFER TO LOGIC SYMBOLS OF STORAGE REGISTERS	0	3	0	0	0	0	0	0	0
Q1114 Q1-05 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS	0	0	0	0	0	0	0	0	0
Q1115 Q1-06 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF REGISTERS	1	0	1	0	0	0	2	0	0

PERCENT MEMBERS PERFORMING TASKS BY DAFSC GRPS

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TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING

		DY-TSK															
		SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
		027	028	029	030	031	041	042	043	044							
Q1114	Q1-07 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP OF A SHIFT REGISTER AFTER A SPECIFIED NUMBER OF SHIFT PULSES	2	3	3	0	0	4	0	0	0							
Q1117	Q2-01 DO YOU WORK WITH DIGITAL COUNTERS, REGISTERS, OR STORAGE DEVICES IN YOUR PRESENT JOB	8	3	10	3	0	11	7	5	0							
Q1118	Q2-02 DO YOU USE OR REFER TO DELAY LINES	1	3	0	3	0	0	0	0	13							
Q1119	Q2-03 DO YOU USE OR REFER TO MAGNETIC CORES	0	3	0	0	0	0	0	0	0							
Q1120	Q2-04 DO YOU USE OR REFER TO MAGNETIC DRUMS	0	3	0	0	0	0	0	0	0							
Q1121	Q2-05 DO YOU USE OR REFER TO MAGNETIC TAPES	0	3	0	0	0	0	0	0	0							
Q1122	Q2-06 DO YOU USE OR REFER TO ACCESS TIME OR SPEED OR MEMORY SYSTEMS	0	3	0	0	0	0	0	0	0							
Q1123	Q2-07 DO YOU USE OR REFER TO WORD CAPACITY OF MEMORY SYSTEMS	0	3	0	0	0	0	0	0	0							
Q1124	Q2-08 DO YOU USE OR REFER TO VOLATILITY OF MEMORY SYSTEMS	0	3	0	0	0	0	0	0	0							
Q1125	Q2-09 DO YOU USE OR REFER TO LOGIC SYMBOL OF DELAY LINES	0	3	0	0	0	0	0	0	0							
Q1126	Q3-01 IN YOUR PRESENT JOB, DO YOU WORK WITH DIGITAL-TO-ANALOG (D/A) CONVERTERS, ANALOG-TO-DIGITAL (A/D) DIGITAL-TO-ANALOG (D/A) CONVERTERS FOR GIVEN INPUT COUNT IN ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS	0	0	1	0	0	1	0	0	0							
Q1127	Q3-02 DO YOU COMPUTE OUTPUT VOLTAGES FOR ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS FOR GIVEN INPUT COUNT IN ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS	0	0	0	0	0	0	0	0	0							
Q1128	Q3-03 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE COUNT IN ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS IN ELECTRONIC DIGITAL-TO-ANALOG (D/A) CONVERTERS	0	0	0	0	0	0	0	0	0							
Q1129	Q3-04 DO YOU COMPUTE ANALOG VOLTAGES FOR GIVEN BINARY COUNTS IN ELECTRONIC DIGITAL-TO-ANALOG (D/A) CONVERTERS	0	0	0	0	0	0	0	0	0							
Q1130	Q3-05 DO YOU PERFORM SAMPLE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0	0	0	0	0							
Q1131	Q3-06 DO YOU PERFORM HOLD FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0	0	0	0	0							
Q1132	Q3-07 DO YOU PERFORM COMPARE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0	0	0	0	0							
Q1133	Q3-08 DO YOU PERFORM DIGITIZE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0	0	0	0	0							
Q1134	Q3-09 DO YOU PERFORM DON'T REMEMBER WHICH FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0	0	0	0	0							
Q1135	Q3-10 DO YOU USE OR REFER TO SAMPLE FUNCTION OF A/D CONVERTERS	0	0	0	0	0	0	0	0	0							
Q1136	Q3-11 DO YOU USE OR REFER TO HOLD FUNCTION OF A/D CONVERTERS	0	0	0	0	0	0	0	0	0							
Q1137	Q3-12 DO YOU USE OR REFER TO COMPARE FUNCTION OF A/D CONVERTERS	0	0	0	0	0	0	0	0	0							
Q1138	Q3-13 DO YOU USE OR REFER TO DIGITAL FUNCTION OF A/D CONVERTERS	0	0	0	0	0	0	0	0	0							
Q1139	Q3-14 DO YOU PERFORM ANY TASKS ON MECHANICAL ANALOG-TO-DIGITAL (A/D) CONVERTERS	0	0	0	0	0	0	0	0	0							

DIGITAL TO
ANALOG CONVERTERS

PERCENT MEMBERS PERFORMING TASKS BY DAFSC GAPS

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TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING

											0Y-TSK										PHANTASTRONS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
											SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL

PHOTO SENSITIVE
DEVICES

SYNCHRONOUS VIBRATION
(CHOPPER CIRCUITS)

INPUT/OUTPUT
DEVICES

CABLE FABRICATION

PHANTASTRONS

SCHMITT TRIGGERS

INFRARED

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-15K

	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
	027	028	029	030	031	041	042	043	044
T1210 T2-25 DO YOU WORK WITH HALF SILVERED 1928 REFLECTIVE!	0	0	1	0	0	1	0	0	0
MINIBORS									
T1211 T2-26 DO YOU WORK WITH MELICAL FLASHTUBES	0	0	1	0	0	1	0	0	0
T1212 T2-27 DO YOU WORK WITH RUBY	0	0	0	0	0	0	0	0	0
T1213 T2-28 DO YOU WORK WITH HELIUM-NEON	0	0	1	0	0	1	0	0	0
T1214 T2-29 DO YOU WORK WITH HELIUM-XENON	0	0	0	0	0	0	0	0	0
T1215 T2-30 DO YOU WORK WITH HELIUM-XENON	0	0	0	0	0	0	0	0	0
T1216 T2-31 DO YOU WORK WITH CESIUM-HELIUM	0	0	0	0	0	0	0	0	0
T1217 T2-32 DO YOU WORK WITH ARGON	1	0	1	0	0	2	0	0	0
T1218 T2-33 DO YOU WORK WITH NEODYMIUM IN GLASS	0	0	0	0	0	0	0	0	0
T1219 T2-34 DO YOU WORK WITH GALLIUM ARSENIDE	0	0	0	0	0	0	0	0	0
T1220 T3-01 IN YOUR PRESENT JOB DO YOU WORK WITH DISPLAY TUBES, SUCH AS DIRECT VIEW STORAGE (DVST) OR MULTIPLE MODE	0	0	1	0	0	0	4	0	0
T1221 T3-02 DO YOU INSPECT DVST OR HMST	0	0	1	0	0	0	4	0	0
T1222 T3-03 DO YOU CLEAN DVST OR HMST	0	0	1	0	0	0	4	0	0
T1223 T3-04 DO YOU ADJUST OR CALIBRATE DVST OR HMST	0	0	1	0	0	0	4	0	0
T1224 T3-05 DO YOU OPERATE SYSTEMS THAT CONTAIN DVST OR HMST	0	0	1	0	0	0	4	0	0
T1225 T3-06 DO YOU TROUBLESHOOT DVST OR HMST	0	0	1	0	0	0	4	0	0
CIRCUITS									
T1226 T3-07 DO YOU REMOVE OR REPLACE DVST OR HMST TUBES FROM MAJOR ASSEMBLIES OR UNITS	0	0	1	0	0	0	4	0	0
T1227 T3-08 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME THE VARIOUS ELEMENTS OF DVST	0	0	0	0	0	0	0	0	0
T1228 T3-09 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME THE VARIOUS ELEMENTS OF HMST	0	0	0	0	0	0	0	0	0
T1229 T3-10 DO YOU PERFORM TASKS ON FLOOD GUNS	0	0	0	0	0	0	0	0	0
T1230 T3-11 DO YOU PERFORM TASKS ON WRITE GUNS	0	0	0	0	0	0	0	0	0
T1231 T3-12 DO YOU PERFORM TASKS ON ATTACK GUNS	0	0	0	0	0	0	0	0	0
T1232 T3-13 DO YOU PERFORM TASKS ON ERASE GUNS	0	0	0	0	0	0	0	0	0
T1233 T3-14 DO YOU PERFORM TASKS ON STORAGE GRIDS	0	0	1	0	0	0	4	0	0
T1234 T3-15 DO YOU PERFORM TASKS ON STORAGE GRIDS	0	0	0	0	0	0	0	0	0
TASKS									
U1235 U1-02 DO YOU USE OR REFER TO DECIMAL SYSTEMS	0	0	0	0	0	0	0	0	0
U1236 U1-03 DO YOU USE OR REFER TO PROGRAMS	0	0	0	0	0	0	0	0	0
U1237 U1-04 DO YOU USE OR REFER TO HEXIDECIMAL SYSTEMS	0	0	0	0	0	0	0	0	0
U1238 U1-05 DO YOU USE OR REFER TO 8-9-2-1 SYSTEMS	0	0	0	0	0	0	0	0	0
U1239 U1-06 DO YOU USE OR REFER TO FOUR SYSTEMS	0	0	0	0	0	0	0	0	0
U1240 U1-07 DO YOU USE OR REFER TO BINARY SYSTEMS	0	0	0	0	0	0	0	0	0
U1241 U1-08 DO YOU USE OR REFER TO TIME-SHARING	0	0	0	0	0	0	0	0	0
U1242 U1-09 DO YOU USE OR REFER TO DATA WORDS	0	0	0	0	0	0	0	0	0
U1243 U1-10 DO YOU USE OR REFER TO ADDRESS WORDS	0	0	0	0	0	0	0	0	0
U1244 U1-11 DO YOU USE OR REFER TO ADDRESS/SUBADDRESS	0	0	0	0	0	0	0	0	0
U1245 U1-12 DO YOU USE OR REFER TO STEERING/INFORMATION	0	0	0	0	0	0	0	0	0
U1246 U1-13 DO YOU USE OR REFER TO INFORMATION WORDS	0	0	0	0	0	0	0	0	0
U1247 U1-14 DO YOU PERFORM TASKS ON SINGLE LEVEL PROGRAMMING	0	0	0	0	0	0	0	0	0
U1248 U1-15 DO YOU PERFORM TASKS ON MULTI-LEVEL PROGRAMMING	0	0	0	0	0	0	0	0	0

PROGRAMMING

DISPLAY TUBES

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

[illegible]

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TABULATION OF PERCENT MEMBERS PERFORMING DUTIES AND TASKS BY AFMS GROUPS IN THE J16XIL/J1790 CAREER FIELD.

REPORTS ON THE FOLLOWING GROUPS WERE REQUESTED

GROUP IDENTITY =	SPL032	ALL AMN WITH 6-24 MOS TIME IN CAREER FIELD	CONTAINING	115 MEMBERS.
GROUP IDENTITY =	SPL033	ALL AMN WITH 25-48 MOS TIME IN CAREER FIELD	CONTAINING	40 MEMBERS.
GROUP IDENTITY =	SPL034	ALL AMN WITH 1-48 MOS TIME IN CAREER FIELD	CONTAINING	164 MEMBERS.
GROUP IDENTITY =	SPL035	ALL AMN WITH 49-96 MOS TIME IN CAREER FIELD	CONTAINING	13 MEMBERS.
GROUP IDENTITY =	SPL036	ALL AMN WITH 97-144 MOS TIME IN CAREER FIELD	CONTAINING	11 MEMBERS.
GROUP IDENTITY =	SPL037	ALL AMN WITH 145 OR MORE MOS TIME IN CAR FLD	CONTAINING	19 MEMBERS.

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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DUTY GROUP SUMMARY PERCENT MEMBERS PERFORMING

DUTY	SPL 032	SPL 033	SPL 034	SPL 035	SPL 036	SPL 037
A MATHEMATICS, DIRECT CURRENT, VOLTAGE, AND RESISTANCE	80	90	84	92	91	93
B MULTIMETER USES, ALTERNATING CURRENT, INDUCTORS, AND INDUCTIVE	82	92	85	92	82	71
C CAPACITORS, CAPACITIVE REACTANCE, TRANSFORMERS, AND MAGNETISM	35	40	38	46	45	50
D RCL CIRCUITS, SERIES AND PARALLEL RESONANCE (TIME CONSTANTS), AND FILTERS	9	7	9	15	9	21
E COUPLING, SOLDERING, AND RELAYS	31	47	35	49	73	57
F MICROPHONES, SPEAKERS, AND OSCILLOSCOPES	38	55	43	54	64	43
G SEMICONDUCTOR DIODES, TRANSISTORS, AND TRANSISTOR AMPLIFIERS	5	10	7	46	18	29
H SOLID STATE SPECIAL PURPOSE DEVICES, POWER SUPPLIES, AND OSCILLATORS	45	52	48	62	55	36
I MULTIVIBRATORS, LIMITERS, CLAMPERS, AND ELECTRON TUBES	10	10	11	23	9	34
J ELECTRON TUBE AMPLIFIERS AND CIRCUITS, SPECIAL PURPOSE ELECTRON TUBES, METEODYNING, MODULATION,	13	13	13	8	18	14
K AM SYSTEMS, FM SYSTEMS, AND NUMBERING SYSTEMS	8	5	8	0	9	7
L LOGIC FUNCTIONS, BOOLEAN EQUATIONS, AND COUNTERS	20	20	20	23	18	14
M TIMING CIRCUITS, USE OF SIGNAL GENERATORS, MOTORS, AND GENERATORS	46	55	47	77	45	29
N METER MOVEMENTS, SATURABLE REACTORS, MAGNETIC AMPLIFIERS, AND WAVESHAPING CIRCUITS	56	52	55	31	64	43
O SINGLE SIDEBAND SYSTEMS, PULSE MODULATION SYSTEMS, AND ANTENNAS	29	42	32	15	18	14
P TRANSMISSION LINES, WAVEGUIDES AND CAVITY RESONATORS, AND MICROWAVE AMPLIFIERS AND OSCILLATORS	18	30	21	31	18	21
Q REGISTERS, STORAGE DEVICES, AND DIGITAL TO ANALOG CONVERTERS	10	10	10	15	9	7
R PHOTOSTATONS, SCHMITT TRIGGERS, AND CABLE FABRICATION	9	5	8	31	36	36
S INPUT/OUTPUT DEVICES, PHOTO SENSITIVE DEVICES, AND SYNCHRONOUS VIBRATIONS	24	17	23	31	36	14
T INFRARED, LASERS, AND DISPLAY TUBES	46	50	47	31	45	43
U PROGRAMMING, DB AND POWER RATIOS	12	2	9	15	27	29

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-75K

	SPL	SPL	SPL	SPL	SPL	SPL	
	032	033	034	035	036	037	
1 A1-01 IN YOUR PRESENT JOB, DO YOU USE INSTRUMENTS, SUCH AS METERS OR OSCILLOSCOPES, IN WHICH IT IS NECESSARY TO	25	47	40	54	27	29	
2 A1-02 DO YOU USE PUBLICATIONS, SUCH AS A TECHNICAL ORDERS OR MAINTENANCE MANUALS, IN WHICH IT IS NECESSARY FOR YOU	23	30	26	31	27	21	
3 A1-03 DO YOU REARRANGE AND SOLVE FORMULAS OR EQUATIONS.	7	7	7	8	9	7	MATHEMATICS
4 A1-04 DO YOU CALCULATE THE SQUARE ROOT OF A QUANTITY.	3	2	3	0	0	7	
5 A1-05 DO YOU SOLVE FOR UNKNOWN QUANTITIES.	8	10	9	31	0	7	
6 A1-06 DO YOU CONVERT NUMBERS TO LOGARITHMS.	1	2	1	0	0	0	
7 A1-07 DO YOU USE LOGARITHM TABLES IN ANY TYPE OF CALCULATIONS.	0	2	1	0	0	0	
8 A1-08 DO YOU SOLVE QUADRATIC EQUATIONS.	1	2	1	0	0	0	
9 A1-09 DO YOU USE THE NATURAL SYSTEM OF LOGARITHMS.	0	2	1	0	0	0	
10 A1-10 DO YOU PERFORM CALCULATIONS ON VECTOR QUANTITIES.	1	2	1	0	0	7	
11 A1-11 DO YOU WORK WITH TRIGONOMETRIC FUNCTIONS SUCH AS SINE, COSINE, OR TANGENT.	1	2	1	0	0	0	
12 A1-12 DO YOU DETERMINE AREAS OF PLANE FIGURES.	2	2	2	0	0	0	
13 A1-13 DO YOU SOLVE OR USE SIMULTANEOUS EQUATIONS.	2	2	2	8	0	0	
14 A1-14 DO YOU SOLVE OR USE PROPORTIONS.	3	2	2	8	0	7	
15 A2-01 DO YOU USE THE TERM VOLTAGE OR VOLT (V).	67	70	71	85	91	79	
16 A2-02 DO YOU USE THE TERM ELECTROMOTIVE FORCE (EMF).	10	13	12	15	18	21	
17 A2-03 DO YOU USE THE TERM OHM.	45	72	68	85	82	71	
18 A2-04 DO YOU USE THE TERM ION.	2	2	2	8	0	0	
19 A2-05 DO YOU USE THE TERM DYNE.	0	5	1	0	0	0	
20 A2-06 DO YOU USE THE TERM AMPERE.	52	57	56	77	73	64	DIRECT CURRENT AND VOLTAGE
21 A2-07 DO YOU USE THE TERM NEUTRON.	3	5	3	0	0	0	
22 A2-08 DO YOU USE THE TERM COULOMB.	3	2	3	0	0	7	
23 A2-09 DO YOU USE THE TERM PROTON.	3	5	3	0	0	0	
24 A3-01 DO YOU WORK WITH RESISTORS IN YOUR PRESENT JOB.	91	95	92	59	36	57	
25 A3-02 DO YOU INSPECT RESISTORS.	24	25	24	46	36	36	
26 A3-03 DO YOU CLEAN RESISTORS.	10	20	13	38	9	21	
27 A3-04 DO YOU ADJUST RESISTORS.	37	35	36	62	36	36	
28 A3-05 DO YOU CHECK OHMIC VALUE OR RESISTORS.	30	30	30	54	36	36	RESISTANCE
29 A3-06 DO YOU REMOVE OR REPLACE RESISTORS.	17	25	19	38	36	43	
30 A3-07 DO YOU USE OR REFER TO TEMPERATURE COEFFICIENTS FOR RESISTORS ON ANY TASKS YOU PERFORM.	3	7	9	8	9	0	
31 A3-08 DO YOU USE OR REFER TO RESISTOR SYMBOLS SUCH AS FIXED RESISTOR SYMBOLS OR TAPPED RESISTOR SYMBOLS.	20	25	21	46	27	43	
32 A3-09 DO YOU IDENTIFY OR CLASSIFY THE RESISTORS YOU WORK WITH AS CARBON, FIXED WIRE, SLIDE TAP, RHEOSTAT, OR	17	25	20	38	27	29	
33 A3-10 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE OHMIC VALUE OF RESISTANCE.	17	15	17	46	36	43	

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING

DT-TSK

SPL SPL SPL SPL SPL
032 033 034 035 036 037

12 13 13 31 36 36

A 34 A3-11 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE TOLERANCE.

A 35 A3-12 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE FAILURE RATE.

A 36 A3-13 DO YOU MAKE DECISIONS IN WHICH YOU MUST DETERMINE HOW TWO OR MORE BATTERIES MUST BE CONNECTED TOGETHER TO REPRESENT BATTERIES, FUSES, CONDUCTORS, LAMPS, OR SWITCHES

A 37 A3-14 DO YOU USE OR REFER TO THE SCHEMATIC SYMBOLS WHICH REPRESENT BATTERIES, FUSES, CONDUCTORS, LAMPS, OR SWITCHES

A 38 A3-15 DO YOU CALCULATE TOTAL RESISTANCE FOR SERIES RESISTIVE CIRCUITS.

A 39 A3-16 DO YOU CALCULATE TOTAL CURRENT FOR SERIES RESISTIVE CIRCUITS.

A 40 A3-17 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR SERIES RESISTIVE CIRCUITS.

A 41 A3-18 DO YOU CALCULATE POWER DISSIPATION FOR SERIES RESISTIVE CIRCUITS.

A 42 A3-19 DO YOU CALCULATE TOTAL RESISTANCE FOR SERIES PARALLEL RESISTIVE CIRCUITS.

A 43 A3-20 DO YOU CALCULATE TOTAL CURRENT FOR SERIES PARALLEL RESISTIVE CIRCUITS.

A 44 A3-21 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR SERIES PARALLEL RESISTIVE CIRCUITS.

A 45 A3-22 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENTS FOR SERIES PARALLEL RESISTIVE CIRCUITS.

A 46 A3-23 DO YOU CALCULATE POWER DISSIPATION FOR SERIES PARALLEL RESISTIVE CIRCUITS.

A 47 A3-24 DO YOU CALCULATE TOTAL RESISTANCE FOR PARALLEL RESISTIVE CIRCUITS.

A 48 A3-25 DO YOU CALCULATE TOTAL CURRENT FOR PARALLEL RESISTIVE CIRCUITS.

A 49 A3-26 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR PARALLEL RESISTIVE CIRCUITS.

A 50 A3-27 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENTS FOR PARALLEL RESISTIVE CIRCUITS.

A 51 A3-28 DO YOU CALCULATE POWER DISSIPATION FOR PARALLEL RESISTIVE CIRCUITS.

B 52 B1-01 DO YOU MEASURE RESISTANCE.

B 53 B1-02 DO YOU REPAIR OHMMETERS.

B 54 B1-03 DO YOU MEASURE VOLTAGE.

B 55 B1-04 DO YOU REPAIR VOLTMETERS.

B 56 B1-05 DO YOU REPAIR AMMETERS.

B 57 B1-06 DO YOU MEASURE CURRENT.

B 58 B1-07 DO YOU USE MULTIMETERS.

B 59 B1-08 DO YOU DIRECTLY USE A QUANTITY OF CHARGE CALLED A COULOMB.

B 60 B1-09 DO YOU READ SCHEMATICS.

MULTIMETER USES

71 82 74 85 64 71

3 2 3 0 0 7

70 75 73 85 64 71

3 0 2 8 9 7

1 2 1 8 0 7

43 50 47 49 45 43

70 82 75 85 64 64

4 0 3 8 0 7

44 70 51 92 64 64

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

		SPL	SPL	SPL	SPL	SPL	SPL	
		032	033	034	035	036	037	
61 82-01 DO YOU USE OR REFER TO THE TERM EFFECTIVE VOLTAGE	20	27	24	62	45	36		ALTERNATING CURRENT
62 82-02 DO YOU USE OR REFER TO THE TERM PEAK TO PEAK VOLTAGE.	22	45	29	69	64	36		
63 82-03 DO YOU USE OR REFER TO THE TERM AVERAGE VOLTAGE (DC).	19	30	24	54	27	43		
64 82-04 DO YOU USE OR REFER TO THE TERM WAVE LENGTH.	24	40	29	38	9	36		
65 82-05 DO YOU USE OR REFER TO THE TERM FREQUENCY.	55	67	60	77	55	57		
66 82-06 DO YOU USE OR REFER TO THE TERM INSTANTANEOUS VALUE.	10	10	10	31	18	21		
67 83-01 DO YOU WORK WITH INDUCTORS OR CIRCUITS CONTAINING INDUCTORS, CHOKES, OR CHDKE COILS IN YOUR PRESENT JOB.	11	7	10	23	18	21		
68 83-02 DO YOU INSPECT INDUCTORS.	4	2	4	23	9	21		
69 83-03 DO YOU CLEAN INDUCTORS.	3	2	3	15	9	14		
70 83-04 DO YOU ADJUST INDUCTORS.	5	5	5	8	9	21		INDUCTORS AND INDUCTIVE REACTANCE
71 83-05 DO YOU REMOVE OR REPLACE INDUCTORS.	3	2	3	8	9	21		
72 83-06 DO YOU USE OR REFER TO INDUCTANCE.	5	5	5	8	9	21		
73 83-07 DO YOU USE OR REFER TO HENRIES.	5	2	5	8	9	21		
74 83-08 DO YOU USE OR REFER TO INDUCTIVE REACTANCE.	4	2	4	8	9	7		
75 83-09 DO YOU USE OR REFER TO COPPER LOSS IN INDUCTORS.	0	2	1	0	0	0		
76 83-10 DO YOU USE OR REFER TO HYSTERESIS LOSS IN INDUCTORS.	1	2	1	0	0	0		
77 83-11 DO YOU USE OR REFER TO EDDY CURRENT LOSS IN INDUCTORS	1	2	1	0	0	0		
78 83-12 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTANCE IS PROPORTIONAL TO THE SQUARE OF THE NUMBER OF	1	0	1	0	0	7		
79 82-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE CROSS	1	0	1	0	0	7		
80 82-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS INVERSELY PROPORTIONAL TO ITS	1	0	1	0	0	0		
81 82-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE	1	0	1	0	0	0		
82 82-16 DO YOU CALCULATE INDUCTANCE FOR PARTICULAR INDUCTORS USING FORMULAS.	1	0	1	0	0	0		
83 83-17 DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTANCE IN SERIES.	2	0	1	8	0	0		
84 83-18 DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTORS IN PARALLEL.	2	0	1	8	0	0		
85 83-19 DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTORS IN SERIES-PARALLEL CIRCUITS.	2	0	1	8	0	0		
86 83-20 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LAGS VOLTAGE IN AC INDUCTOR CIRCUITS.	3	0	3	8	9	7		
87 83-21 DO YOU CALCULATE INDUCTIVE REACTANCE.	2	0	1	0	0	0		
88 83-22 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTIVE REACTANCE IS DIRECTLY PROPORTIONAL TO FREQUENCY.	2	0	2	8	9	0		
89 83-23 DO YOU WORK WITH AUDIO FREQUENCY INDUCTORS.	3	2	4	15	9	0		
90 83-24 DO YOU WORK WITH RADIO FREQUENCY INDUCTORS.	3	0	2	4	0	0		
91 83-25 DO YOU WORK WITH RADIO FREQUENCY INDUCTORS.	4	2	4	8	9	0		

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING

DY-TSK									
C	92	CI-01	DO YOU WORK WITH CAPACITORS OR CIRCUITS CONTAINING CAPACITORS IN YOUR PRESENT JOB.	25	27	26	31	36	14
C	93	CI-02	DO YOU INSPECT CAPACITORS.	13	17	14	23	27	29
C	94	CI-03	DO YOU CLEAN CAPACITORS.	6	13	7	15	9	14
C	95	CI-04	DO YOU ADJUST CAPACITORS.	10	15	11	15	9	21
C	96	CI-05	DO YOU TEST CAPACITORS.	10	15	12	8	18	29
C	97	CI-06	DO YOU DISCHARGE CAPACITORS.	10	15	12	8	9	21
C	98	CI-07	DO YOU REMOVE OR REPLACE CAPACITORS.	7	17	9	23	18	29
C	99	CI-08	DO YOU USE OR REFER TO DISTRIBUTED CAPACITANCE.	0	2	1	8	9	0
C	100	CI-09	DO YOU USE OR REFER TO ORBITAL STRESS OF ELECTRONS IN A DIELECTRIC.	0	2	1	0	0	0
C	101	CI-10	DO YOU USE OR REFER TO FARADS, MICROFARADS, OR PICOFARADS.	7	13	9	23	27	14
C	102	CI-11	DO YOU USE OR REFER TO CAPACITANCE.	13	17	14	23	18	14
C	103	CI-12	DO YOU USE OR REFER TO DIELECTRIC CONSTANT	3	7	4	8	0	0
C	104	CI-13	DO YOU USE OR REFER TO WORKING VOLTAGE RATING OF CAPACITORS	3	7	4	15	18	21
C	105	CI-14	DO YOU USE OR REFER TO CAPACITIVE REACTANCE	3	2	3	8	9	7
C	106	CI-15	DO YOU USE OR REFER TO CAPACITOR COLOR CODES	5	7	6	8	18	14
C	107	CI-16	DO YOU WORK WITH CAPACITORS IN DC CIRCUITS	17	20	19	23	36	29
C	108	CI-17	DO YOU WORK WITH CAPACITORS IN AC CIRCUITS	22	20	22	15	36	29
C	109	CI-18	DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC	17	22	18	8	36	29
C	110	CI-19	DO YOU WORK WITH CAPACITORS IN DON'T REMEMBER WHICH CIRCUITS	8	13	9	8	0	14
C	111	CI-20	DO YOU CALCULATE CAPACITANCE FOR PARTICULAR CAPACITORS USING FORMULAS	1	0	1	0	0	0
C	112	CI-21	DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS DIRECTLY PROPORTIONAL TO THE	0	0	1	0	0	0
C	113	CI-22	DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS INVERSELY PROPORTIONAL TO	0	0	1	0	0	0
C	114	CI-23	DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN SERIES	2	0	1	8	9	0
C	115	CI-24	DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN PARALLEL	2	0	1	8	9	0
C	116	CI-25	DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN SERIES-PARALLEL CIRCUITS	2	0	1	8	9	0
C	117	CI-26	DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT DOES NOT FLOW THROUGH CAPACITORS, IT ONLY APPEARS TO DO SO	1	0	1	8	18	7
C	118	CI-27	DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LEADS VOLTAGE IN AC CAPACITOR CIRCUITS	2	0	2	0	9	7
C	119	CI-28	DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITIVE REACTANCE IS INVERSELY PROPORTIONAL TO	1	0	1	0	9	7
C	120	CI-29	DO YOU CALCULATE CAPACITIVE REACTANCE	1	0	1	0	9	0

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

0Y-TSK

SPL SPL SPL SPL SPL SPL
032 033 034 035 036 037

C 121 C1-30 DO YOU WORK WITH ROTOR-STATOR (VARIABLE) CAPACITORS 6 13 8 15 18 14
C 122 C1-31 DO YOU WORK WITH COMPRESSION (TRIMMER) CAPACITORS 3 13 6 8 18 14
C 123 C1-32 DO YOU WORK WITH ELECTROLYTIC (FIXED) CAPACITORS 12 17 13 15 27 21
C 124 C1-33 DO YOU WORK WITH PAPER (FIXED) CAPACITORS 6 15 9 15 27 29
C 125 C1-34 DO YOU WORK WITH MICA (FIXED) CAPACITORS 8 17 10 15 27 29
C 126 C1-35 DO YOU WORK WITH CERAMIC (FIXED) CAPACITORS 9 17 11 15 27 29
C 127 C1-36 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE OF 8 15 10 15 9 0

CAPACITORS

C 128 C2-01 DO YOU WORK WITH TRANSFORMERS IN YOUR PRESENT JOB 9 13 10 23 36 14
C 129 C2-02 DO YOU INSPECT TRANSFORMERS 5 7 6 15 18 29
C 130 C2-03 DO YOU CLEAN TRANSFORMERS 4 7 5 15 9 29
C 131 C2-04 DO YOU ADJUST TRANSFORMERS 9 7 5 23 9 7
C 132 C2-05 DO YOU TROUBLESHOOT TRANSFORMERS 5 2 5 15 18 14
C 133 C2-06 DO YOU REMOVE OR REPLACE COMPLETE TRANSFORMERS 4 5 4 23 27 29
C 134 C2-07 DO YOU REMOVE OR REPLACE TRANSFORMER PARTS, SUCH AS THE PRIMARY WINDING 0 0 0 0 0 0
C 135 C2-08 DO YOU MAKE A DISTINCTION BETWEEN MUTUAL INDUCTION AND MUTUAL INDUCTANCE (M) 1 0 1 0 0 0
C 136 C2-09 DO YOU USE THE SYMBOL FOR MUTUAL INDUCTANCE, M 1 0 1 0 0 0
C 137 C2-10 DO YOU REFER TO OR USE THE COEFFICIENT OF COUPLING WHEN WORKING WITH TRANSFORMERS 3 0 2 8 0 0
C 138 C2-11 DO YOU CALCULATE TURNS RATIOS FOR TRANSFORMERS USING CURRENT OR VOLTAGE RATIOS 1 0 1 8 0 0
C 139 C2-12 DO YOU REFER TO REFLECTED IMPEDANCE WHEN WORKING WITH TRANSFORMERS 1 0 1 8 0 0

TRANSFORMERS

C 140 C2-13 DO YOU CALCULATE IMPEDANCE INTERACTIONS FOR TRANSFORMERS 1 0 1 8 0 0
C 141 C2-14 DO YOU WORK WITH AUTOTRANSFORMERS 2 2 2 0 9 0
C 142 C2-15 DO YOU WORK WITH POWER TRANSFORMERS 3 10 5 8 18 29
C 143 C2-16 DO YOU WORK WITH AUDIO TRANSFORMERS 2 0 2 0 18 0
C 144 C2-17 DO YOU WORK WITH RADIO FREQUENCY TRANSFORMERS 2 0 2 0 0 7
C 145 C2-18 DO YOU WORK WITH DON'T REMEMBER WHAT TYPE OF TRANSFORMERS 1 7 2 15 18 0
C 146 C2-19 DO YOU CHECK TRANSFORMERS FOR OPEN WINDINGS BY MEASURING RESISTANCE 5 5 5 8 27 7
C 147 C2-20 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING RESISTANCE 4 5 5 8 18 7
C 148 C2-21 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING OUTPUT VOLTAGES 5 5 5 15 18 7
C 149 C2-22 DO YOU MEASURE RESISTANCE OF TRANSFORMER WINDINGS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN 3 5 3 8 0 0
C 150 C2-23 DO YOU MEASURE OUTPUT VOLTAGE OF TRANSFORMERS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN 4 5 4 8 0 0
C 151 C2-24 DO YOU REFER TO BASIC TRANSFORMER SCHEMATIC SYMBOLS FOR TRANSFORMERS 4 7 5 8 18 21

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK											
	SPL 032	SPL 033	SPL 034	SPL 035	SPL 036	SPL 037	SPL 038	SPL 039	SPL 040	SPL 041	SPL 042	SPL 043
C 152 C2-25 DO YOU REFER TO MULTIPLE SECONDARY-WINDINGS SCHEMATIC SYMBOLS FOR TRANSFORMERS	3	5	4	0	9	7						
C 153 C2-26 DO YOU REFER TO MULTIPLE TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS	4	7	5	15	18	7						
C 154 C2-27 DO YOU REFER TO CENTER TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS	4	7	5	15	27	7						
C 155 C2-28 DO YOU REFER TO AIR CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS	3	7	4	0	18	0						
C 156 C2-29 DO YOU REFER TO IRON CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS	4	7	5	0	18	0						
C 157 C2-30 DO YOU REFER TO COMBINATIONS OF THE ABOVE SCHEMATIC SYMBOLS FOR TRANSFORMERS	3	10	5	8	18	7						
C 158 C2-31 DO YOU DETERMINE PHASE RELATIONSHIPS BETWEEN SECONDARY AND PRIMARY VOLTAGES OF TRANSFORMERS USING TRANSFORMERS YOU WORK WITH	3	5	3	8	0	0						
C 159 C2-32 DO YOU DETERMINE OR REFER TO THE TYPE OF CORE IN TRANSFORMERS YOU WORK WITH	3	0	2	8	9	0						
C 160 C2-33 DO YOU REFER TO OR USE THE GENERAL RULE THAT THE TURNS RATIO OF A TRANSFORMER IS EQUAL TO THE VOLTAGE RATIO	2	0	2	0	9	0						
C 161 C2-34 DO YOU USE OR REFER TO STEP-UP OR STEP-DOWN RATIOS FOR TRANSFORMERS	3	5	4	8	9	0						
C 162 C2-35 DO YOU CALCULATE VOLTAGE RATIOS FOR TRANSFORMERS USING TURNS RATIOS	1	0	1	0	0	0						
C 163 C2-36 DO YOU CALCULATE CURRENT RATIOS FOR TRANSFORMERS USING TURNS RATIOS	1	0	1	0	0	0						
C 164 C2-37 DOES YOUR JOB INVOLVE ANY TASKS DEALING WITH THREE PHASE TRANSFORMERS	4	7	5	8	18	0						
C 165 C2-38 DO YOU INSPECT THREE PHASE TRANSFORMERS	4	2	4	8	18	0						
C 166 C2-39 DO YOU CLEAN OR LUBRICATE THREE PHASE TRANSFORMERS	3	2	3	8	18	0						
C 167 C2-40 DO YOU ADJUST THREE PHASE TRANSFORMERS	3	5	4	8	0	0						
C 168 C2-41 DO YOU TROUBLESHOOT THREE PHASE TRANSFORMERS	3	2	3	8	9	0						
C 169 C2-42 DO YOU REMOVE OR REPLACE COMPLETE THREE PHASE TRANSFORMERS	3	2	2	8	18	0						
C 170 C2-43 DO YOU REMOVE OR REPLACE THREE PHASE TRANSFORMER PARTS SUCH AS WINDINGS	1	2	1	0	0	0						
C 171 C3-01 DO YOU USE OR REFER TO PERMANENT MAGNETS	12	7	12	23	9	14						
C 172 C3-02 DO YOU USE OR REFER TO TEMPORARY MAGNETS	10	7	9	15	0	14						
C 173 C3-03 DO YOU USE OR REFER TO RETENTIVITY OF MAGNETIC MATERIALS	3	0	2	0	0	7						
C 174 C3-04 DO YOU USE OR REFER TO RELUCTANCE OF MAGNETIC MATERIALS	4	0	3	0	0	7						
C 175 C3-05 DO YOU USE OR REFER TO PERMEABILITY OF MAGNETIC MATERIALS	4	0	3	0	0	7						
C 176 C3-06 DO YOU USE OR REFER TO RESIDUAL MAGNETISM	3	0	2	8	0	0						
C 177 C3-07 DO YOU USE OR REFER TO MAGNETIC LINES OF FORCE OR FLUX	9	7	8	15	18	7						
C 178 C3-08 DO YOU USE OR REFER TO WEBER'S THEORY OF MAGNETISM	2	0	1	8	0	0						

MAGNETISM

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

0Y-TSK

SPL SPL SPL SPL SPL SPL
032 033 034 035 036 037

C 179 C3-09 DO YOU USE OR REFER TO DOMAIN THEORY OF MAGNETISM	2	0	1	8	0	0
C 180 C3-10 DO YOU USE OR REFER TO MAGNETIC INDUCTION	5	2	4	8	9	7
C 181 C3-11 DO YOU USE OR REFER TO FLUX DENSITY	3	0	2	8	0	0
C 182 C3-12 DO YOU USE OR REFER TO THE GENERAL RULE THAT FOR MAGNETIC POLES, LIKE POLES REPEL AND UNLIKE POLES ATTRACT	10	10	11	15	9	14
C 183 C3-13 DO YOU USE THE LEFT HAND THUMB RULE TO FIND THE DIRECTION OF MAGNETIC FIELDS ABOUT STRAIGHT WIRES	6	0	4	15	0	0
C 184 C3-14 DO YOU USE THE LEFT HAND THUMB RULE TO FIND THE NORTH POLE OF A CURRENT CARRYING COIL	5	0	4	15	0	0
D 185 D1-01 DO YOU WORK WITH RC, LR, RCL CIRCUITS IN YOUR PRESENT JOB	4	2	4	8	9	7
D 186 D1-02 DO YOU USE OR REFER TO VECTORS WHEN WORKING WITH RCL CIRCUITS	1	0	1	0	0	0
D 187 D1-03 DO YOU USE OR REFER TO PYTHAGOREAN THEOREM WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	0	0
D 188 D1-04 DO YOU USE OR REFER TO SINE WHEN WORKING WITH RCL CIRCUITS	2	0	1	0	0	0
D 189 D1-05 DO YOU USE OR REFER TO COSINE WHEN WORKING WITH RCL CIRCUITS	1	0	1	0	0	0
D 190 D1-06 DO YOU USE OR REFER TO TANGENT WHEN WORKING WITH RCL CIRCUITS	2	0	1	0	0	0
D 191 D1-07 DO YOU USE OR REFER TO WAITS WHEN WORKING WITH RCL CIRCUITS	3	2	2	8	9	14
D 192 D1-08 DO YOU USE OR REFER TO TRUE POWER (PT) WHEN WORKING WITH RCL CIRCUITS	2	0	1	0	0	0
D 193 D1-09 DO YOU USE OR REFER TO MAXIMUM POWER (PM) WHEN WORKING WITH RCL CIRCUITS	3	2	2	0	0	0
D 194 D1-10 DO YOU USE OR REFER TO AVERAGE POWER (PAVE) WHEN WORKING WITH RCL CIRCUITS	3	2	2	0	0	0
D 195 D1-11 DO YOU USE OR REFER TO APPARENT POWER (PA) WHEN WORKING WITH RCL CIRCUITS	2	0	1	0	0	0
D 196 D1-12 DO YOU USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH RCL CIRCUITS	3	0	2	0	0	0
D 197 D1-13 DO YOU USE OR REFER TO RESONANT CIRCUITS WHEN WORKING WITH RCL CIRCUITS	2	2	2	0	9	14
D 198 D1-14 DO YOU USE OR REFER TO BANDWIDTH WHEN WORKING WITH RCL CIRCUITS	3	2	3	8	9	14
D 199 D1-15 DO YOU USE OR REFER TO SELECTIVITY WHEN WORKING WITH RCL CIRCUITS	3	2	2	8	9	7
D 200 D1-16 DO YOU USE OR REFER TO RESONANT FREQUENCY WHEN WORKING WITH RCL CIRCUITS	3	2	3	0	9	14
D 201 D1-17 DO YOU USE OR REFER TO HALF POWER POINTS WHEN WORKING WITH RCL CIRCUITS	2	0	1	0	9	7
D 202 D1-18 DO YOU USE OR REFER TO BANDPASS REGION WHEN WORKING WITH RCL CIRCUITS	3	2	2	0	0	0
D 203 D1-19 DO YOU USE OR REFER TO CIRCUIT Q WHEN WORKING WITH RCL CIRCUITS	1	0	1	0	0	0

RCL CIRCUITS

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING

DY-TSK

SPL SPL SPL SPL SPL
032 033 034 035 036 037

D 204 DI-20 DO YOU USE OR REFER TO TANK CIRCUITS WHEN WORKING WITH RCL CIRCUITS	3	2	3	0	9	7
D 205 DI-21 DO YOU DETERMINE VALUES OF TRIGONOMETRIC FUNCTIONS USING FORMULAS	1	0	1	0	0	0
D 206 DI-22 DO YOU DRAW VOLTAGE, CURRENT, OR IMPEDANCE VECTOR DIAGRAMS FOR CIRCUITS	0	0	0	0	0	0
D 207 DI-23 DO YOU CALCULATE TOTAL IMPEDANCE FOR CAPACITIVE CIRCUITS	0	0	0	0	0	0
D 208 DI-24 DO YOU CALCULATE PHASE ANGLES BETWEEN IMPEDANCE AND RESISTANCE IN CAPACITIVE CIRCUITS	0	0	0	0	0	0
D 209 DI-25 DO YOU CALCULATE TOTAL IMPEDANCE FOR SERIES RCL CIRCUITS	1	0	1	0	0	0
D 210 DI-26 DO YOU CALCULATE IMPEDANCE ANGLES FOR SERIES RCL CIRCUITS	1	0	1	0	0	0
D 211 DI-27 DO YOU CALCULATE APPARENT POWER (PA) FOR SERIES RCL CIRCUITS	1	0	1	0	0	0
D 212 DI-28 DO YOU CALCULATE TRUE POWER (PT) FOR SERIES RCL CIRCUITS	1	0	1	0	0	0
D 213 DI-29 DO YOU CALCULATE POWER FACTORS (PF) FOR SERIES RCL CIRCUITS	1	0	1	0	0	0
D 214 DI-30 DO YOU CALCULATE TOTAL CURRENT FOR PARALLEL RCL CIRCUITS	1	0	1	0	0	0
D 215 DI-31 DO YOU CALCULATE IMPEDANCE ANGLES FOR PARALLEL RCL CIRCUITS	1	0	1	0	0	0
D 216 DI-32 DO YOU CALCULATE TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS USING THE ASSUMED VOLTAGE METHOD	1	0	1	0	0	0
D 217 DI-33 DO YOU CALCULATE TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS USING OHM'S LAW	2	0	1	0	0	0
D 218 DI-34 DO YOU CHECK CAPACITORS USING OHMMETERS	3	2	3	8	9	14
D 219 DI-35 DO YOU CHECK CAPACITORS USING SUBSTITUTION	3	2	2	8	9	14
D 220 DI-36 DO YOU CHECK INDUCTORS USING OHMMETERS	4	2	4	0	9	14
D 221 DI-37 DO YOU CHECK INDUCTORS USING SUBSTITUTION	3	2	2	0	9	14
D 222 DI-38 DO YOU USE OR REFER TO THE GENERAL RULE THAT THETA = 0, PF = 1, AND PA = PT FOR RESONANT CIRCUITS	0	0	0	0	0	0
D 223 DI-39 DO YOU CALCULATE RESONANT FREQUENCIES FOR RCL CIRCUITS	0	0	0	0	0	0
D 224 DI-40 DO YOU USE OR REFER TO THE GENERAL RULE THAT IMPEDANCE IS MINIMUM AND CURRENT MAXIMUM AT THE RESONANT	2	0	1	0	9	0
D 225 DI-41 DO YOU USE OR REFER TO THE GENERAL RULE THAT LINE CURRENT IS MINIMUM AND IMPEDANCE MAXIMUM AT RESONANT	1	0	1	0	9	0
D 226 DI-42 DO YOU USE OR REFER TO THE GENERAL RULE THAT HALF POWER POINTS ARE AT 70.7 PERCENT OF THE PEAK CURRENT VALUE	1	0	1	0	9	0
D 227 DI-43 DO YOU USE OR REFER TO THE GENERAL RULE THAT BANDWIDTH IS INVERSELY PROPORTIONAL TO Q	0	0	0	0	0	0
D 228 DI-44 DO YOU DETERMINE HOW CHANGES IN FREQUENCY, RESISTANCE, CAPACITANCE, OR INDUCTANCE WILL AFFECT CURRENT OR PHASE	1	0	1	0	9	0

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY

PERCENT MEMBERS PERFORMING

DY-TSK

SPL SPL SPL SPL SPL
032 033 034 035 036 037

D 259 D3-21 DON'T REMEMBER WHICH TYPE OF BASIC CIRCUIT
D 260 D3-22 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE
CAPACITANCE OR INDUCTANCE VALUES REQUIRED FOR SPECIFIC
E 261 E1-01 DO YOU WORK WITH COUPLING DEVICES IN YOUR PRESENT JOB
E 262 E1-02 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO
THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH RC
E 263 E1-03 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO
THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH
E 264 E1-04 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO
THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH
E 265 E1-05 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS
WHICH PERFORM RC COUPLING
E 266 E1-06 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS
WHICH PERFORM IMPEDANCE COUPLING
E 267 E1-07 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS
WHICH PERFORM TRANSFORMER COUPLING
E 268 E1-08 DO YOU WORK WITH DIRECTLY COUPLED CIRCUITS
E 269 E1-09 DO YOU WORK WITH CAPACITIVE-RESISTIVE COUPLED
CIRCUITS
E 270 E1-10 DO YOU WORK WITH CAPACITIVE-INDUCTIVE COUPLED
CIRCUITS
E 271 E1-11 DO YOU WORK WITH TRANSFORMER COUPLED CIRCUITS
E 272 E1-12 DON'T REMEMBER WHICH TYPE OF COUPLING CIRCUITS
E 273 E2-01 IN YOUR PRESENT JOB, DO YOU PERFORM SOLDERING
TECHNIQUES OR INSPECT OR EVALUATE SOLDERED CONNECTIONS
E 274 E2-02 DO YOU SELECT TYPE OF SOLDER TO USE
E 275 E2-03 DO YOU ADD FLUX TO CONNECTIONS
E 276 E2-04 DO YOU CLEAN CONNECTIONS USING SOLVENTS
E 277 E2-05 DO YOU STRIP INSULATION FROM WIRES
E 278 E2-06 DO YOU CONNECT OR DISCONNECT HEAT SINKS
E 279 E2-07 DO YOU BEND OR SHAPE WIRES OR LEADS
E 280 E2-08 DO YOU CUT WIRES
E 281 E2-09 DO YOU FILE OR SHAPE SOLDERING IRON TIPS
E 282 E2-10 DO YOU TIN SOLDERING IRON TIPS
E 283 E2-11 DO YOU CLEAN SOLDERING IRON TIPS
E 284 E2-12 DO YOU CLEAN ELECTRICAL SURFACES USING ERASERS
E 285 E2-13 DO YOU TIN OR PRE-TIN CONDUCTORS
E 286 E2-14 DO YOU INSPECT SOLDERED CONNECTIONS
E 287 E2-15 DO YOU DESOLDER CONNECTIONS BY WICKING
E 288 E2-16 DO YOU DESOLDER CONNECTIONS USING VACUUM DESOLDERING
TOOLS
E 289 E2-17 DO YOU CUT COMPONENT LEADS TO REMOVE COMPONENTS
E 290 E2-18 DO YOU CRUSH COMPONENTS FOR REMOVAL

COUPLING

SOLDERING

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		SPL									
		032	033	034	035	036	037				
01-75K											
CAPACITORS ON PRINTED CIRCUIT BOARDS											
E 291 E2-19 DO YOU MAKE HARDWARE CONNECTIONS		19	32	22	42	45	43				
E 292 E2-20 DO YOU MAKE PRINTED CIRCUIT BOARD CONNECTIONS		13	20	15	38	27	43				
E 293 E2-21 DO YOU SOLDER PASSIVE COMPONENTS SUCH AS RESISTORS OR		10	20	12	38	18	36				
DIODES OR TRANSISTORS ON PRINTED CIRCUIT BOARDS											
E 294 E2-22 DO YOU SOLDER ACTIVE COMPONENTS SUCH AS SOLID-STATE		9	20	12	38	18	29				
RELAYS											
E 295 E3-01 DO YOU WORK WITH RELAYS ON YOUR PRESENT JOB		15	17	15	46	27	21				
E 296 E3-02 DO YOU ADJUST RELAYS		10	7	10	38	18	29				
E 297 E3-03 DO YOU CLEAN RELAYS		7	7	7	31	9	21				
E 298 E3-04 DO YOU INSPECT RELAYS		13	20	15	46	9	29				
E 299 E3-05 DO YOU REMOVE OR REPLACE COMPLETE RELAYS		13	22	15	46	27	29				
E 300 E3-06 DO YOU REMOVE OR REPLACE PARTS OR RELAYS		4	2	4	8	0	0				
E 301 E3-07 DO YOU TROUBLESHOOT RELAYS		11	13	12	38	18	29				
E 302 E3-08 DO YOU STRAIGHTEN RELAY CONTACTS		10	13	11	15	9	7				
E 303 E3-09 DO YOU PERFORM TASKS ON RELAY CONTACTS		8	5	8	8	0	7				
E 304 E3-10 DO YOU PERFORM TASKS ON RELAY COILS		3	0	3	8	0	0				
E 305 E3-11 DO YOU PERFORM TASKS ON RELAY COILS		3	0	4	8	9	0				
E 306 E3-12 DO YOU PERFORM TASKS ON RELAY ARMATURES		4	0	4	8	9	0				
E 307 E3-13 DO YOU PERFORM TASKS ON RELAY SPRINGS		4	0	4	15	0	7				
E 308 E3-14 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW		10	17	12	38	9	36				
E 309 E3-15 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW		10	17	12	38	9	36				
E 310 E3-16 DO YOU USE OR REFER TO SINGLE POLE, DOUBLE THROW		10	17	12	38	9	36				
E 311 E3-17 DO YOU USE OR REFER TO DOUBLE POLE, DOUBLE THROW		9	17	11	38	9	36				
E 312 E3-18 DO YOU USE OR REFER TO OTHER RELAY SYMBOLS SCHEMATIC		7	17	10	31	9	29				
E 313 E3-19 DO YOU CHECK ELECTRICAL CONTINUITY OF COILS BY		7	13	9	8	9	21				
MEASURING RESISTANCE											
F 314 F1-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING		3	0	2	0	9	0				
WITH MICROPHONES											
F 315 F1-02 DO YOU INSPECT MICROPHONES		2	0	1	0	0	0				
F 316 F1-03 DO YOU CLEAN MICROPHONES		0	0	0	0	0	0				
F 317 F1-04 DO YOU OPERATE MICROPHONES		3	0	2	0	9	0				
F 318 F1-05 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE		0	0	0	0	0	0				
CONNECTIONS BUT DO NOT TROUBLESHOOT DOWN TO COMPONENT											
F 319 F1-06 DO YOU TROUBLESHOOT DOWN TO MICROPHONE PARTS		0	0	0	0	0	0				
F 320 F1-07 DO YOU REMOVE OR REPLACE COMPLETE MICROPHONES		2	0	1	0	0	0				
F 321 F1-08 DO YOU REMOVE OR REPLACE MICROPHONE PARTS		0	0	0	0	0	0				
F 322 F1-09 DO YOU PERFORM TASKS ON CARBON MICROPHONES		0	0	0	0	0	0				
F 323 F1-10 DO YOU PERFORM TASKS ON CAPACITOR MICROPHONES		0	0	0	0	0	0				
F 324 F1-11 DO YOU PERFORM TASKS ON CRYSTAL MICROPHONES		0	0	0	0	0	0				
F 325 F1-12 DO YOU PERFORM TASKS ON DYNAMIC MICROPHONES		1	0	1	0	0	0				
F 326 F1-13 DO YOU PERFORM TASKS ON VELOCITY RIBBON MICROPHONES		0	0	0	0	0	0				

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING

SPK SPL SPL SPL SPL SPL
032 033 034 035 036 037

DY-TSK

F 327 F2-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH SPEAKERS
F 328 F2-02 DO YOU INSPECT SPEAKERS
F 329 F2-03 DO YOU CLEAN SPEAKERS
F 330 F2-04 DO YOU OPERATE SPEAKERS
F 331 F2-05 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS BUT DO NOT TROUBLESHOOT DOWN TO COMPONENT

F 332 F2-06 DO YOU TROUBLESHOOT DOWN TO SPEAKER PARTS
F 333 F2-07 DO YOU REMOVE OR REPLACE COMPLETE SPEAKERS
F 334 F2-08 DO YOU REMOVE OR REPLACE SPEAKER PARTS
F 335 F2-09 DO YOU PERFORM ANY TASKS ON SPEAKER CONES

F 336 F2-10 DO YOU PERFORM ANY TASKS ON SPEAKER SPIDERS
F 337 F2-11 DO YOU PERFORM ANY TASKS ON SPEAKER FIELD COILS
F 338 F2-12 DO YOU PERFORM ANY TASKS ON SPEAKER VOICE COILS
F 339 F2-13 DO YOU PERFORM ANY TASKS ON SPEAKER PERMANENT MAGNETS
F 340 F2-14 DO YOU PERFORM ANY TASKS ON SPEAKER ELECTROMAGNETS
F 341 F2-15 DO YOU PERFORM ANY TASKS ON SPEAKER SOFT IRON CORES

F 342 F3-01 DO YOU USE OSCILLOSCOPES IN YOUR PRESENT JOB
F 343 F3-02 DO YOU USE OSCILLOSCOPES TO PERFORM OPERATIONAL CHECKS

F 344 F3-03 DO YOU USE OSCILLOSCOPES TO PERFORM ALIGNMENTS OR ADJUSTMENTS

F 345 F3-04 DO YOU USE OSCILLOSCOPES TO TROUBLESHOOT ELECTRONIC CIRCUITS

F 346 F3-05 DO YOU USE OSCILLOSCOPES TO MEASURE FREQUENCY
F 347 F3-06 DO YOU USE OSCILLOSCOPES TO MEASURE TIME
F 348 F3-07 DO YOU USE OSCILLOSCOPES TO OBSERVE LISAJOUS PATTERNS
F 349 F3-08 DO YOU USE OSCILLOSCOPES TO OBSERVE SIGNALS WHILE UTILIZING ATTENUATOR PROBES

F 350 F3-09 DO YOU USE OSCILLOSCOPES TO MAKE FREQUENCY OR TIME MEASUREMENTS USING DELAY TIME MULTIPLIERS
F 351 F3-10 DO YOU USE OSCILLOSCOPES TO MEASURE AC VOLTAGE
F 352 F3-11 DO YOU USE OSCILLOSCOPES TO MEASURE OR OBSERVE SIGNALS AFTER FIRST ADJUSTING THE GAIN AND DC BAL CONTROLS
F 353 F3-12 DO YOU USE OSCILLOSCOPES TO MEASURE DC VOLTAGE

G 354 G1-01 DO YOU WORK WITH SEMICONDUCTOR DIODES IN YOUR PRESENT JOB
G 355 G1-02 DO YOU INSPECT DIODES
G 356 G1-03 DO YOU REMOVE OR REPLACE DIODES
G 357 G1-04 DO YOU CHECK DIODES USING AN INSTRUMENT
G 358 G1-05 DO YOU USE ENERGY LEVEL DIAGRAMS IN YOUR WORK WITH DIODES

G 359 G1-06 DO YOU USE PN JUNCTION DIODE CHARACTERISTIC CURVES, TOGETHER WITH VALUES OF FORWARD AND REVERSE BIAS VOLTAGE, TO COMPUTE FORWARD OR REVERSE BIAS RESISTANCE FOR DIODES

G 360 G1-07 DO YOU COMPUTE FORWARD OR REVERSE BIAS RESISTANCE FOR DIODES

SPEAKERS

OSCILLOSCOPES

SEMICONDUCTOR DIODES

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		SPL	SPL	SPL	SPL	SPL	SPL
		032	033	034	035	036	037
6 361 61-08 DO YOU USE OR REFER TO THE GENERAL RULE THAT	TEMPERATURE CAN AFFECT THE OPERATION OF DIODES	4	2	9	15	18	21
6 362 61-09 DO YOU IDENTIFY SEMICONDUCTOR DIODES AS OPPOSED TO	OTHER ELECTRONIC COMPONENTS, SUCH AS RESISTORS, BASED ON	3	5	9	15	18	21
6 363 61-10 DO YOU REFER TO OR DO YOU DETERMINE THE GENERAL	EFFECTS OF DOPING ON CURRENT FLOW	1	0	1	0	0	0
6 364 61-11 DO YOU USE OR REFER TO MEASUREMENTS OF FORWARD BIAS	RESISTANCE	4	5	5	8	9	7
6 365 61-12 DO YOU USE OR REFER TO DIODE COLOR CODING		4	5	5	15	9	7
6 366 61-13 DO YOU USE OR REFER TO CENTRIFUGAL FORCE OF AN	ELECTRON IN ORBIT AROUND A NUCLEUS	0	0	0	0	0	0
6 367 61-14 DO YOU USE OR REFER TO CENTRIPETAL FORCE OF AN	ELECTRON IN ORBIT AROUND A NUCLEUS	0	0	0	0	0	0
6 368 61-15 DO YOU USE OR REFER TO DIODE NUMBERING SYSTEM, SUCH	AS IN 538	3	5	4	8	18	14
6 369 61-16 DO YOU USE OR REFER TO KINETIC ENERGY OF AN ELECTRON	MOVING IN ORBIT	1	0	1	0	0	0
6 370 61-17 DO YOU USE OR REFER TO POTENTIAL ENERGY OF AN	ELECTRON MOVING IN ORBIT	0	0	0	0	0	0
6 371 61-18 DO YOU USE OR REFER TO MEASUREMENTS OF REVERSE BIAS	RESISTANCE	3	5	4	0	18	7
6 372 61-19 DO YOU USE OR REFER TO NUMBER OF ELECTRONS IN A	PARTICULAR SHELL OR ORBIT	0	0	0	0	0	0
6 373 61-20 DO YOU USE OR REFER TO PERMISSIBLE ENERGY LEVELS OF	AN ORBITING ELECTRON	0	0	0	0	0	0
6 374 61-21 DO YOU USE OR REFER TO FORBIDDEN ENERGY LEVELS OF AN	ORBITING ELECTRON	0	0	0	0	0	0
6 375 61-22 DO YOU USE OR REFER TO VALENCE ELECTRONS (THOSE IN	THE OUTERMOST SHELL)	1	0	1	0	0	0
6 376 61-23 DO YOU USE OR REFER TO ATOMIC NUMBER (TOTAL NUMBER OF	ELECTRONS IN ATOM)	0	0	0	0	0	0
6 377 61-24 DO YOU USE OR REFER TO SYMBOLS ON THE DIODE WHICH	INDICATE THE CATHODE END	4	5	5	23	18	21
6 378 61-25 DO YOU NEED TO KNOW WHICH MATERIALS ARE USED IN THE	CONSTRUCTION OF DIODES SUCH AS GERMANIUM OR SILICON	3	2	2	8	0	0
6 379 61-26 DO YOU NEED TO KNOW THAT SEMICONDUCTORS HAVE NEGATIVE	TEMPERATURE COEFFICIENTS OF RESISTANCE (AS TEMPERATURE	3	2	4	8	18	21
6 380 61-27 DO YOU USE OR REFER TO PN JUNCTION DIODE	CHARACTERISTIC CURVES, SUCH AS VOLTAGE - CURRENT	0	0	1	0	0	0
6 381 61-28 DO YOU DETERMINE WHETHER PN JUNCTION DIODES ARE	FORWARD BIASED OR REVERSE BIASED WHEN YOU READ OR	2	2	2	0	18	14
6 382 61-29 DO YOU USE OR REFER TO VALENCE BAND IN SEMICONDUCTOR	MATERIALS	0	0	0	0	0	0

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	SPL			SPL			SPL			SPL		
	032	033	034	035	036	037	032	033	034	035	036	037
6 383 G1-30 DO YOU USE OR REFER TO FORBIDDEN BAND IN SEMICONDUCTOR MATERIALS	0	0	0	0	0	0						
6 384 G1-31 DO YOU USE OR REFER TO CONDUCTION BAND IN SEMICONDUCTOR MATERIALS	0	0	0	0	0	0						
6 385 G1-32 DO YOU USE OR REFER TO COVALENT BONDING IN SEMICONDUCTOR MATERIALS	0	0	0	0	0	0						
6 386 G1-33 DO YOU USE OR REFER TO ELECTRON-HOLE PAIR CREATED IN SEMICONDUCTORS	0	0	0	0	0	0						
6 387 G1-34 DO YOU USE OR REFER TO ELECTRON FLOW OR HOLE FLOW IN SEMICONDUCTORS	0	0	0	0	0	0						
6 388 G1-35 DO YOU USE OR REFER TO DONOR IMPURITY IN SEMICONDUCTORS	1	0	1	0	0	0						
6 389 G1-36 DO YOU USE OR REFER TO ACCEPTOR IMPURITY IN SEMICONDUCTORS	1	0	1	0	0	0						
6 390 G1-37 DO YOU USE OR REFER TO P-TYPE SEMICONDUCTOR MATERIAL	2	0	1	0	0	0						
6 391 G1-38 DO YOU USE OR REFER TO N-TYPE SEMICONDUCTOR MATERIAL	2	0	1	0	0	0						
6 392 G1-39 DO YOU USE OR REFER TO MAJORITY CARRIERS IN SEMICONDUCTORS	1	0	1	0	0	0						
6 393 G1-40 DO YOU USE OR REFER TO MINORITY CARRIERS IN SEMICONDUCTORS	1	0	1	0	0	0						
6 394 G1-41 DO YOU USE OR REFER TO JUNCTION RECOMBINATION IN SEMICONDUCTORS	1	0	1	0	0	0						
6 395 G1-42 DO YOU USE OR REFER TO DEPLETION REGION IN SEMICONDUCTORS	1	0	1	0	0	0						
6 396 G1-43 DO YOU USE OR REFER TO RELATIONSHIP BETWEEN BARRIER WIDTH AND DIFFERENCE OF POTENTIAL	0	0	0	0	0	0						
6 397 G1-44 DO YOU USE OR REFER TO THE 10:1 BACK TO FRONT RESISTANCE RATIO FOR DIODES	0	0	1	15	18	14						
6 398 G1-45 DO YOU USE OR REFER TO BARRIER HEIGHT IN SEMICONDUCTORS	0	0	0	0	0	0						
6 399 G1-46 DO YOU USE OR REFER TO DIODE SUBSTITUTION INFORMATION	2	0	2	8	16	21						
6 400 G1-47 DO YOU USE OR REFER TO MAXIMUM AVERAGE FORWARD CURRENT DIODE RATINGS	1	0	1	8	18	0						
6 401 G1-48 DO YOU USE OR REFER TO PEAK RECURRENT FORWARD CURRENT DIODE RATINGS	0	0	1	8	18	0						
6 402 G1-49 DO YOU USE OR REFER TO MAXIMUM SURGE CURRENT DIODE RATINGS	0	0	1	8	18	0						
6 403 G1-50 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE DIODE RATINGS	1	0	1	8	18	0						
6 404 G2-01 DO YOU WORK WITH TRANSISTORS IN YOUR PRESENT JOB.	3	5	4	15	9	21						
6 405 G2-02 DO YOU INSPECT TRANSISTORS	3	5	4	15	9	14						
6 406 G2-03 DO YOU REMOVE OR REPLACE TRANSISTORS	2	5	2	15	9	14						
6 407 G2-04 DO YOU CHECK TRANSISTORS USING AN INSTRUMENT	3	5	4	8	9	14						
6 408 G2-05 DO YOU USE OR REFER TO EMITTER - BASE (EB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS	2	2	2	0	9	14						
6 409 G2-06 DO YOU USE OR REFER TO COLLECTOR - BASE (CB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS	2	2	2	0	9	14						

TRANSISTORS

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK									
	SPL 032	SPL 033	SPL 034	SPL 035	SPL 036	SPL 037				
6 437 63-10 DO YOU USE OR REFER TO (COMMON EMITTER) THE CHANGE IN COLLECTOR VOLTAGE WHICH RESULTS FROM A CHANGE IN BASE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN BASE CURRENT WHICH RESULTS FROM AN INPUT SIGNAL	1	0	1	0	0	0				
6 438 63-11 DO YOU USE OR REFER TO (COMMON EMITTER) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN BASE CURRENT WHICH RESULTS FROM AN INPUT SIGNAL	1	0	1	0	0	0				
6 439 63-12 DO YOU USE OR REFER TO (COMMON EMITTER) THE CHANGE IN BASE CURRENT WHICH RESULTS FROM AN INPUT SIGNAL	1	0	1	0	0	0				
6 440 63-13 DO YOU USE OR REFER TO (COMMON EMITTER) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN CIRCUIT ANALYSIS (THIS METHOD REQUIRES YOU TO PLOT A QUIESCENT POINT) FOR A TRANSISTOR	0	0	1	0	0	0				
6 441 63-14 DO YOU CALCULATE THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS USING A FORMULA THAT IS, DO YOU DIVIDE THE CHANGE IN VOLTAGE BY THE CHANGE IN CURRENT	0	0	0	0	0	0				
6 442 63-15 DO YOU USE OR REFER TO THE OPERATING POINT Q (QUIESCENT POINT) FOR A TRANSISTOR	0	0	1	0	0	0				
6 443 63-16 DO YOU CALCULATE THE SPECIFIC QUIESCENT POINT FOR A PARTICULAR TRANSISTOR	0	0	0	0	0	0				
6 444 63-17 DO YOU MEASURE VOLTAGE GAIN USED IN THE COMMON EMITTER CONFIGURATION	0	2	1	0	0	0				
6 445 63-18 DO YOU MEASURE CURRENT GAIN USED IN THE COMMON EMITTER CONFIGURATION	0	0	1	0	0	0				
6 446 63-19 DO YOU MEASURE POWER GAIN USED IN THE COMMON EMITTER CONFIGURATION	0	0	1	0	0	0				
6 447 63-20 DO YOU CALCULATE THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS USING A FORMULA THAT IS, DO YOU DIVIDE THE CHANGE IN VOLTAGE BY THE CHANGE IN CURRENT	0	0	0	0	0	0				
6 448 63-21 DO YOU CALCULATE THE CURRENT GAIN FOR SPECIFIC TRANSISTORS USING A FORMULA THAT IS, DO YOU DIVIDE THE CHANGE IN CURRENT BY THE CHANGE IN VOLTAGE	0	0	0	0	0	0				
6 449 63-22 DO YOU CALCULATE THE POWER GAIN FOR A SPECIFIC TRANSISTOR USING A FORMULA THAT IS, DO YOU MULTIPLY THE CHANGE IN POWER BY THE CHANGE IN CURRENT	0	0	0	0	0	0				
6 450 63-23 DO YOU NEED TO KNOW THAT MORE COLLECTOR CURRENT IS GENERATED WITH LESS COLLECTOR VOLTAGE AS TEMPERATURE INCREASES	0	0	0	0	0	0				
6 451 63-24 DO YOU COMPUTE THE STATIC OPERATING POINT (Q) OF A TRANSISTOR AT DIFFERENT TEMPERATURES	0	0	0	0	0	0				
6 452 63-25 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH THE ACTUAL CIRCUITRY	0	0	1	0	0	0				
6 453 63-26 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH SELF-	0	0	1	0	0	0				

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

	SPL	SPL	SPL	SPL	SPL	SPL
	032	033	034	035	036	037
G 454 G3-27 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	0	0	1	0	0	0
G 455 G3-28 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	0	0	1	0	0	0
G 456 G3-29 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	0	0	1	0	0	0
G 457 G3-30 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	0	0	1	0	0	0
G 458 G3-31 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM EMITTER (SMAPPING) RESISTOR STABILIZATION	0	0	1	0	0	0
G 459 G3-32 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM SELF-BIAS STABILIZATION	0	0	1	0	0	0
G 460 G3-33 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM THERMISTOR STABILIZATION	0	0	1	0	0	0
G 461 G3-34 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM FORWARD BIAS DIODE STABILIZATION	0	0	1	0	0	0
G 462 G3-35 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM REVERSE BIAS DIODE STABILIZATION	0	0	1	0	0	0
G 463 G3-36 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM DOUBLE DIODE STABILIZATION	0	0	1	0	0	0
G 464 G3-37 DO YOU IDENTIFY AMPLITUDE DISTORTION FOR TRANSISTOR CIRCUITS	0	0	1	0	0	0
G 465 G3-38 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF AMPLITUDE DISTORTION	0	0	1	0	0	0
G 466 G3-39 DO YOU IDENTIFY FREQUENCY DISTORTION FOR TRANSISTOR CIRCUITS	0	0	1	0	0	0
G 467 G3-40 DO YOU IDENTIFY PHASE DISTORTION FOR TRANSISTOR CIRCUITS	0	0	1	0	0	0
G 468 G3-41 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF PHASE DISTORTION	0	0	1	0	0	0
G 469 G3-42 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF FREQUENCY DISTORTION	0	0	1	0	0	0
G 470 G3-43 DO YOU NEED TO KNOW THE DEGENERATIVE EFFECTS ON THE CIRCUIT CAUSED BY CHANGING EMITTER RESISTANCE FOR	0	0	1	0	0	0
G 471 G3-44 DO YOU DETERMINE THE CLASS OF OPERATION FOR AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS	0	0	1	0	0	0
G 472 G3-45 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS	0	0	1	0	0	0
G 473 G3-46 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS	1	2	2	0	0	0
G 474 G3-47 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRIC CIRCUITS	0	0	1	0	0	0
G 475 G3-48 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS	0	0	1	0	0	0

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK		SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
		032	033	034	035	036	037		
6 476	63-49 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS	0	0	1	0	0	0		
M 477	M1-01 DO YOU USE OR REFER TO VARACTORS	1	5	2	0	0	0		
M 478	M1-02 DO YOU USE OR REFER TO TUNNEL DIODES	1	2	2	0	0	0		
M 479	M1-03 DO YOU USE OR REFER TO FIELD EFFECT TRANSISTORS (FET)	1	5	2	0	9	0		
M 480	M1-04 DO YOU USE OR REFER TO UNIJUNCTION TRANSISTORS	1	5	2	0	18	0		
M 481	M1-05 DO YOU USE OR REFER TO ZENER DIODES	7	22	11	15	18	21		
M 482	M1-06 DO YOU USE OR REFER TO INTEGRATED CIRCUITS	10	27	13	15	18	27		
M 483	M2-01 IN YOUR PRESENT JOB, DO YOU WORK WITH POWER SUPPLIES	40	45	42	46	45	29		
M 484	M2-02 DO YOU INSPECT POWER SUPPLIES	27	35	29	54	34	29		
M 485	M2-03 DO YOU CLEAN POWER SUPPLIES	23	27	24	46	27	29		
M 486	M2-04 DO YOU ALIGN OR ADJUST POWER SUPPLIES	21	30	23	54	36	29		
M 487	M2-05 DO YOU TROUBLESHOOT TO POWER SUPPLY CIRCUIT LEVEL	10	20	13	23	27	21		
M 488	M2-06 DO YOU TROUBLESHOOT TO POWER SUPPLY COMPONENTS	9	20	12	38	18	21		
M 489	M2-07 DO YOU REMOVE OR REPLACE COMPLETE POWER SUPPLIES	17	25	19	46	27	29		
M 490	M2-08 DO YOU REMOVE OR REPLACE POWER SUPPLY COMPONENTS	7	17	9	31	18	29		
M 491	M2-09 DO YOU WORK WITH HALF-WAVE RECTIFIERS	6	7	7	23	18	21		
M 492	M2-10 DO YOU WORK WITH FULL-WAVE RECTIFIERS OTHER THAN BRIDGE RECTIFIERS	6	7	7	23	9	29		
M 493	M2-11 DO YOU WORK WITH BRIDGE RECTIFIERS	11	7	10	15	18	21		
M 494	M2-12 DO YOU WORK WITH THREE-PHASE RECTIFIERS	8	5	7	0	9	0		
M 495	M2-13 DO YOU USE OR REFER TO INPUT VOLTAGE	23	22	24	38	36	29		
M 496	M2-14 DO YOU USE OR REFER TO INPUT FREQUENCY	20	20	20	38	27	21		
M 497	M2-15 DO YOU USE OR REFER TO PEAK OUTPUT VOLTAGE	11	17	13	31	27	21		
M 498	M2-16 DO YOU USE OR REFER TO AVERAGE OUTPUT VOLTAGE	10	13	11	31	27	21		
M 499	M2-17 DO YOU USE OR REFER TO RIPPLE AMPLITUDE	5	7	6	15	18	21		
M 500	M2-18 DO YOU USE OR REFER TO RIPPLE FREQUENCY	5	7	6	15	18	21		
M 501	M2-19 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE	5	7	6	8	9	0		
M 502	M2-20 DO YOU USE OR REFER TO SHAPE OF OUTPUT WAVEFORMS	9	5	8	31	18	21		
M 503	M2-21 DO YOU USE OR REFER TO EFFECTIVE OUTPUT VOLTAGE	9	13	10	23	27	29		
M 504	M2-22 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE FILTERS	3	10	5	0	18	14		
M 505	M2-23 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE FILTERS	3	10	5	0	9	14		
M 506	M2-24 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE INPUT L-TYPE FILTERS	3	10	5	0	9	0		
M 507	M2-25 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE INPUT L-TYPE FILTERS	2	10	4	0	9	0		
M 508	M2-26 DO YOU WORK WITH CIRCUITS WHICH EMPLOY LC PI-TYPE FILTERS	2	10	4	8	9	0		
M 509	M2-27 DO YOU WORK WITH CIRCUITS WHICH EMPLOY RC PI-TYPE FILTERS	10	13	10	15	0	21		
M 510	M2-28 DO YOU WORK WITH CIRCUITS WHICH EMPLOY DONUT REMEMBER WHICH TYPE OF FILTER	3	5	3	0	0	0		
M 511	M2-29 DO YOU HAVE THE OPTION OF REPLACING ONE TYPE OF FILTER WITH A DIFFERENT TYPE FILTER	5	5	6	8	18	21		
M 512	M3-01 DO YOU WORK WITH OSCILLATORS IN YOUR PRESENT JOB	5	5	6	8	18	21		

SOLID-STATE SPECIAL PURPOSE
DEVICES

POWER SUPPLIES

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK										SPL SPL SPL SPL SPL SPL									
		032 033 034 035 036 037																			
OSCILLATORS																					
M 513	M3-02 DO YOU INSPECT OSCILLATORS	4	5	5	8	18	21														
M 514	M3-03 DO YOU ALIGN OR ADJUST OSCILLATORS	4	2	5	6	9	21														
M 515	M3-04 DO YOU REMOVE OR REPLACE COMPLETE OSCILLATORS	3	2	4	8	18	21														
M 516	M3-05 DO YOU REMOVE OR REPLACE OSCILLATOR COMPONENTS	2	0	1	0	9	21														
M 517	M3-06 DO YOU TROUBLESHOOT TO OSCILLATOR CIRCUIT LEVEL	3	0	2	0	18	21														
M 518	M3-07 DO YOU TROUBLESHOOT TO OSCILLATOR COMPONENTS	1	0	1	0	9	21														
M 519	M3-08 DO YOU USE OR REFER TO FEEDBACK	4	0	4	0	9	14														
M 520	M3-09 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES	2	0	2	0	9	0														
(FDD)																					
M 521	M3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY	2	2	3	0	9	14														
M 522	M3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY	2	2	3	0	18	14														
M 523	M3-12 DO YOU USE OR REFER TO DAMPING	3	0	4	0	9	7														
M 524	M3-13 DO YOU USE OR REFER TO REGENERATIVE FEEDBACK	1	0	2	0	9	7														
M 525	M3-14 DO YOU USE OR REFER TO PIEZOELECTRIC EFFECT	1	0	1	0	18	0														
M 526	M3-15 DO YOU USE OR REFER TO CRITICAL DAMPING	1	0	1	0	0	0														
M 527	M3-16 DO YOU USE OR REFER TO UNDER DAMPING	1	0	1	0	0	0														
M 528	M3-17 DO YOU USE OR REFER TO OVER DAMPING	1	0	1	0	0	0														
M 529	M3-18 DO YOU WORK WITH OSCILLATORS WHICH USE LC TANK	3	2	2	0	9	0														
CIRCUITS AS FDD																					
M 530	M3-19 DO YOU WORK WITH OSCILLATORS WHICH USE RC NETWORKS AS	3	2	2	0	9	0														
M 531	M3-20 DO YOU WORK WITH OSCILLATORS WHICH USE CRYSTALS AS	3	2	2	0	9	14														
FDD																					
M 532	M3-21 DO YOU WORK WITH OSCILLATORS WHICH USE DON'T REMEMBER	2	0	2	0	9	7														
WHICH TYPE OF FDD																					
M 533	M3-22 DO YOU WORK WITH SERIES HARTLEY SINUSOIDAL	0	2	1	0	0	0														
OSCILLATORS																					
M 534	M3-23 DO YOU WORK WITH SHUNT HARTLEY SINUSOIDAL OSCILLATORS	0	2	1	0	0	0														
M 535	M3-24 DO YOU WORK WITH COLPITTS SINUSOIDAL OSCILLATORS	0	2	1	0	0	0														
M 536	M3-25 DO YOU WORK WITH CLAPP SINUSOIDAL OSCILLATORS	0	2	1	0	0	0														
M 537	M3-26 DO YOU WORK WITH BUTLER SINUSOIDAL OSCILLATORS	0	2	1	0	0	0														
M 538	M3-27 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE OF	3	0	2	0	18	21														
OSCILLATORS																					
M 539	I1-01 DO YOU WORK WITH MULTIVIBRATORS IN YOUR PRESENT JOB	2	0	2	0	9	7														
M 540	I1-02 DO YOU INSPECT WAVE GENERATING OR SHAPING CIRCUITS	2	0	2	0	9	7														
M 541	I1-03 DO YOU ALIGN OR ADJUST WAVE GENERATING OR SHAPING	2	0	2	0	9	7														
CIRCUITS																					
M 542	I1-04 DO YOU CALIBRATE WAVE GENERATING OR SHAPING CIRCUITS	2	0	2	0	9	7														
M 543	I1-05 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING	2	0	2	0	9	7														
CIRCUITS																					
M 544	I1-06 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING	2	0	2	0	9	7														
CIRCUIT COMPONENTS																					
M 545	I1-07 DO YOU REMOVE OR REPLACE COMPLETE WAVE GENERATING OR	2	0	1	0	9	0														
SHAPING CIRCUITS																					
M 546	I1-08 DO YOU REMOVE OR REPLACE WAVE GENERATING OR SHAPING	2	0	1	0	9	7														
COMPONENTS																					
M 547	I1-09 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN LC TANK	1	0	1	0	9	7														
CIRCUITS																					

MULTIVIBRATORS

MULTIVIBRATORS

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK											
	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
	032	033	034	035	036	037						
1 548 11-10 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN RC NETWORKS	1	0	1	0	9	7						
1 549 11-11 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN CRYSTALS	1	0	1	0	9	7						
1 550 11-12 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN DON'T REMEMBER WHICH TYPE OF FDD	2	0	1	0	0	0						
1 551 11-13 DO YOU WORK WITH ASTABLE MULTIVIBRATORS	0	0	1	0	0	0						
1 552 11-14 DO YOU WORK WITH MONOSTABLE MULTIVIBRATORS	1	0	1	0	9	0						
1 553 11-15 DO YOU WORK WITH BISTABLE MULTIVIBRATORS	1	0	1	0	9	0						
1 554 11-16 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE MULTIVIBRATORS	2	0	1	0	0	7						
1 555 12-01 DO YOU WORK WITH LIMITERS OR CLAMPERS IN YOUR PRESENT JOB	3	0	2	0	9	0						
1 556 12-02 DO YOU WORK WITH SERIES DIODE LIMITERS	1	0	1	0	9	0						
1 557 12-03 DO YOU WORK WITH SHUNT DIODE LIMITERS	1	0	1	0	9	0						
1 558 12-04 DO YOU WORK WITH LIMITERS WITH BIAS	1	0	1	0	9	0						
1 559 12-05 DO YOU WORK WITH ZENER DIODE LIMITERS	1	0	1	0	9	0						
1 560 12-06 DO YOU WORK WITH TRANSISTOR LIMITERS	0	0	0	0	0	0						
1 561 12-07 DO YOU WORK WITH DON'T KNOW WHICH TYPE OF LIMITERS	2	0	1	0	0	0						
1 562 12-08 DO YOU WORK WITH BASIC DIODE CLAMPING CIRCUITS	1	0	1	0	9	0						
1 563 12-09 DO YOU WORK WITH DIODE CLAMPING CIRCUITS WITH BIAS	1	0	1	0	9	0						
1 564 12-10 DO YOU WORK WITH DON'T KNOW WHICH TYPE OF CLAMPING CIRCUIT	2	0	1	0	0	7						
1 565 13-01 IN YOUR PRESENT JOB, DO YOU WORK ON EQUIPMENT WHICH CONTAINS ELECTRON TUBES	9	10	10	23	9	36						
1 566 13-02 DO YOU CHECK ELECTRON TUBES TO SEE IF THEY ARE GOOD	3	5	9	8	9	36						
1 567 13-03 DO YOU USE TUBE TESTERS TO CHECK ELECTRON TUBES	4	5	5	8	9	36						
1 568 13-04 DO YOU USE MULTIMETERS TO CHECK ELECTRON TUBES	9	2	4	15	9	14						
1 569 13-05 DO YOU USE SCOPES TO CHECK ELECTRON TUBES	3	2	3	15	9	14						
1 570 13-06 DO YOU USE SUBSTITUTION TO CHECK ELECTRON TUBES	3	2	4	23	9	29						
1 571 13-07 DO YOU USE OR REFER TO CUTOFF	3	2	3	8	9	0						
1 572 13-08 DO YOU USE OR REFER TO PEAK INVERSE VOLTAGE RATING	2	2	2	8	0	0						
1 573 13-09 DO YOU USE OR REFER TO PEAK CURRENT RATING	2	2	2	8	0	0						
1 574 13-10 DO YOU USE OR REFER TO TRANSIT TIME	2	2	2	8	0	0						
1 575 13-11 DO YOU USE OR REFER TO PLATE DISSIPATION RATING	2	2	2	8	0	0						
1 576 13-12 DO YOU USE OR REFER TO SATURATION	2	2	2	8	0	7						
1 577 13-13 DO YOU USE OR REFER TO DC PLATE RESISTANCE	2	2	2	8	9	0						
1 578 13-14 DO YOU COMPUTE ACTUAL VALUES OF THE DC PLATE RESISTANCE FOR ELECTRON TUBES	2	2	2	8	0	0						
1 579 13-15 DO YOU USE OR REFER TO PLATE VOLTAGE	4	7	5	8	9	14						
1 580 13-16 DO YOU USE OR REFER TO PLATE CURRENT	3	7	5	8	9	14						
1 581 13-17 DO YOU USE OR REFER TO GRID VOLTAGE	4	7	5	8	9	7						
1 582 13-18 DO YOU USE OR REFER TO GRID CURRENT	3	7	5	8	9	7						
1 583 13-19 DO YOU USE OR REFER TO CATHODE VOLTAGE	4	7	5	8	9	14						
1 584 13-20 DO YOU USE OR REFER TO CATHODE CURRENT	3	7	5	8	9	7						
1 585 13-21 DO YOU USE OR REFER TO THE TRIODE AMPLIFICATION FACTOR (THE AMPLIFICATION FACTOR FOR TRIODES IS DEFINED AS	1	0	1	8	9	0						

LIMITERS AND CLAMPERS

ELECTRON TUBES

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING

		DY-TSK						
		SPL	SPL	SPL	SPL	SPL	SPL	SPL
		032	033	034	035	036	037	
1 586 13-22 DO YOU CALCULATE ACTUAL VALUES OF TRIODE	AMPLIFICATION FACTORS	1	0	1	0	0	0	
1 587 13-23 DO YOU USE OR REFER TO MULTIGRID (TETRODE, PENTODE, ETC) AMPLIFICATION FACTORS		1	0	1	0	9	0	
1 588 13-24 DO YOU USE OR REFER TO ELECTRON TUBE TRANSCONDUCTANCE (G, WHICH IS MEASURED IN MHOS)		0	0	1	0	0	0	
1 589 13-25 DO YOU CALCULATE ACTUAL VALUES OF ELECTRON TUBE TRANSCONDUCTANCES		0	0	0	0	0	0	
1 590 13-26 DO YOU USE OR REFER TO THE ELECTRON TUBE PARAMETER CALLED AC PLATE RESISTANCE		1	0	1	0	0	0	
1 591 13-27 DO YOU CALCULATE ACTUAL VALUES OF AC PLATE RESISTANCE		1	0	1	0	0	0	
1 592 13-28 DO YOU USE OR REFER TO ELECTRON TUBE INTERELECTRODE CAPACITANCE		1	0	1	0	9	0	
1 593 13-29 DO YOU USE OR REFER TO CHARACTERISTIC CURVES IN YOUR WORK WITH ELECTRON TUBES		1	0	1	0	9	0	
1 594 13-30 DO YOU USE CHARACTERISTIC CURVES TO SELECT PLATE VOLTAGE FOR A SPECIFIED BIAS		1	0	1	0	0	0	
1 595 13-31 DO YOU USE CHARACTERISTIC CURVES TO SELECT PLATE CURRENT FOR A SPECIFIED BIAS		1	0	1	0	0	0	
1 596 13-32 DO YOU USE CHARACTERISTIC CURVES TO SELECT BIAS REQUIRED FOR CUTOFF		1	0	1	0	0	0	
1 597 13-33 DO YOU USE CHARACTERISTIC CURVES TO SELECT BIAS REQUIRED FOR SATURATION		1	0	1	0	0	0	
1 598 13-34 DO YOU USE OR REFER TO ELECTRON TUBE AMPLIFIER GAIN		3	2	3	0	9	7	
1 599 13-35 DO YOU USE OR REFER TO ELECTRON TUBE AMPLIFIER EFFICIENCY		3	2	3	0	0	7	
1 600 13-36 DO YOU USE TEST TUBE CHECKERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN		2	5	2	0	9	21	
1 601 13-37 DO YOU USE MULTIMETERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN		3	2	2	0	9	7	
1 602 13-38 DO YOU USE OSCILLOSCOPES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN		3	0	3	0	9	7	
1 603 13-39 DO YOU USE CHARACTERISTIC CURVES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN		2	0	1	0	0	7	
1 604 13-40 DO YOU CALCULATE ANY ELECTRON TUBE CAPACITANCES SUCH AS INPUT CAPACITANCE		1	0	1	0	0	7	
1 605 13-41 DO YOU USE OR REFER TO TUBE SOCKET NOTATION		3	5	4	0	9	29	
1 606 13-42 DO YOU USE OR REFER TO PIN NUMBERING SYSTEMS		3	7	5	0	9	36	
1 607 13-43 DO YOU USE OR REFER TO THE TYPE OF MATERIAL OR THE OPERATING TEMPERATURE OF THE EMITTING SURFACE IN THE		1	2	2	0	0	7	
1 608 13-44 DO YOU USE OR REFER TO TUBE SUBSTITUTION MATERIAL SUCH AS MANUALS OR CHARTS		3	0	2	0	9	36	
1 609 11-01 DO YOU WORK WITH ELECTRON TUBE AMPLIFIERS OR CIRCUITS IN YOUR PRESENT JOB		3	2	3	0	9	14	
1 610 11-02 DO YOU DETERMINE THE CLASS OF OPERATION FOR ELECTRON TUBE AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER		3	2	2	0	9	7	

ELECTRON TUBE AMPLIFIERS AND CIRCU

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK		SPL 032	SPL 033	SPL 034	SPL 035	SPL 036	SPL 037
J 611	J1-03 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS	3	0	2	0	0	14
J 612	J1-04 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS	3	0	2	0	9	14
J 613	J1-05 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS	1	0	1	0	9	7
J 614	J1-06 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS	1	0	1	0	9	7
J 615	J1-07 DO YOU TROUBLESHOOT OR REPAIR DON'T KNOW WHICH TYPE OF AMPLIFIER	2	0	2	0	0	0
J 616	J2-01 DO YOU WORK WITH GAS TUBES (HOT CATHODE OR COLD CATHODE)	5	7	5	0	9	14
J 617	J2-02 DO YOU WORK WITH CATHODE-RAY TUBES	8	7	7	8	9	7
J 618	J2-03 DO YOU USE OR REFER TO THE CHARACTERISTICS OF BEAM POWER TUBES	1	2	2	0	9	0
J 619	J2-04 DO YOU TROUBLESHOOT OR REPAIR CIRCUITS IN WHICH BEAM POWER TUBES ARE USED	2	2	2	0	9	0
J 620	J2-05 DO YOU USE OR REFER TO THE CHARACTERISTICS OF THYRATONS	2	2	2	0	9	0
J 621	J2-06 DO YOU TROUBLESHOOT OR REPAIR CIRCUITS IN WHICH THYRATONS ARE USED	3	2	2	0	0	7
J 622	J2-07 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRON GUNS OF CATHODE-RAY TUBES (CRT)	5	2	5	0	9	0
J 623	J2-08 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROMAGNETIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES	3	0	3	0	9	0
J 624	J2-09 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROSTATIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES	3	2	4	0	9	0
J 625	J2-10 DO YOU USE OR REFER TO PHOSPHOR SCREENS	2	2	2	0	9	7
J 626	J2-11 DO YOU USE OR REFER TO AQUADAG COATINGS	2	2	2	0	9	0
J 627	J2-12 DO YOU USE OR REFER TO ELECTRON OPTICS	1	2	2	0	0	0
J 628	J2-13 DO YOU USE OR REFER TO PERSISTENCE	1	2	2	0	9	0
J 629	J2-14 DO YOU USE OR REFER TO DECAY TIMES	1	2	2	0	9	0
J 630	J2-15 DO YOU USE OR REFER TO FLUORESCENCE	1	2	2	0	9	0
J 631	J2-16 DO YOU USE OR REFER TO PHOSPHORESCENCE	2	2	2	0	9	0
J 632	J3-01 DO YOU WORK ON TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	8	7	7	0	9	7
J 633	J3-02 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS	4	5	4	0	9	7
J 634	J3-03 DO YOU PERFORM TASKS ON FREQUENCY MIXERS	3	5	4	0	9	7
J 635	J3-04 DO YOU USE OR REFER TO THE HETERODYNING OF SIGNALS IN YOUR WORK WITH TRANSMIT OR RECEIVE SYSTEMS	2	5	2	0	0	7
J 636	J3-05 DO YOU PERFORM TASKS ON REACTANCE MODULATORS	2	2	2	0	9	0
J 637	J3-06 DO YOU PERFORM TASKS ON MODULATED OSCILLATORS	3	2	3	0	9	0
K 638	K1-01 DO YOU WORK ON AM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	1	0	1	0	9	7
K 639	K1-02 DO YOU INSPECT AM TRANSMIT OR RECEIVE SYSTEMS	2	0	1	0	9	0
K 640	K1-03 DO YOU CLEAN AM TRANSMIT OR RECEIVE SYSTEMS	1	0	1	0	9	0
K 641	K1-04 DO YOU ALIGN OR ADJUST AM TRANSMIT OR RECEIVE SYSTEMS	1	0	1	0	9	7

HETERODYNING, MODULATION, AND DEMODULATION

AM SYSTEMS

SPECIAL PURPOSE ELECTRON TUBES

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

SPL SPL SPL SPL SPL SPL
032 033 034 035 036 037

K 642 K1-05 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE SYSTEMS	1	0	1	0	9	0
K 643 K1-06 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE COMPONENTS	1	0	1	0	0	0
K 644 K1-07 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE SYSTEMS	2	0	1	0	9	7
K 645 K1-08 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE COMPONENTS	1	0	1	0	0	0
K 646 K1-09 DO YOU PERFORM TASKS ON RF OSCILLATORS	1	0	1	0	9	7
K 647 K1-10 DO YOU PERFORM TASKS ON RF AMPLIFIERS	1	0	1	0	9	7
K 648 K1-11 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS	0	0	0	0	9	7
K 649 K1-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS	1	0	1	0	9	7
K 650 K1-13 DO YOU PERFORM TASKS ON LOCAL OSCILLATORS	1	0	1	0	9	7
K 651 K1-14 DO YOU PERFORM TASKS ON IF AMPLIFIERS	1	0	1	0	9	7
K 652 K1-15 DO YOU PERFORM TASKS ON DETECTORS	1	0	1	0	9	7
K 653 K1-16 DO YOU PERFORM TASKS ON DON'T REMEMBER WHICH AM STAGE	0	0	0	0	0	0
K 654 K1-17 DO YOU USE OR REFER TO AMPLITUDE STABILIZATION IN TRANSMITTERS	0	0	0	0	9	0
K 655 K1-18 DO YOU USE OR REFER TO FREQUENCY STABILIZATION IN TRANSMITTERS	0	0	0	0	9	0
K 656 K1-19 DO YOU USE OR REFER TO SENSITIVITY OF RECEIVERS	2	0	1	0	9	7
K 657 K1-20 DO YOU USE OR REFER TO SELECTIVITY OF RECEIVERS	1	0	1	0	9	7
K 658 K1-21 DO YOU USE OR REFER TO 2ND HARMONIC DISTORTION	1	0	1	0	0	7
K 659 K1-22 DO YOU USE OR REFER TO BANDPASS DISTORTION	0	0	0	0	0	7
K 660 K1-23 DO YOU USE OR REFER TO SQUARE LAW DISTORTION	0	0	0	0	0	0
K 661 K1-24 DO YOU USE OR REFER TO CO-CHANNEL INTERFERENCE	0	0	0	0	0	0
K 662 K1-25 DO YOU USE OR REFER TO IMAGE FREQUENCIES IN RECEIVERS	0	0	0	0	0	0
K 663 K1-26 DO YOU USE OR REFER TO SIGNAL TO IMAGE RATIOS OR IMAGE REJECTION RATIOS	0	0	0	0	0	0
K 664 K1-27 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH AM TRANSMITTER SCHEMATIC DIAGRAMS	1	0	1	0	9	7
K 665 K1-28 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH AM RECEIVER SCHEMATIC DIAGRAMS	1	0	1	0	9	0
K 666 K2-01 DO YOU WORK WITH FM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	2	2	2	0	0	0
K 667 K2-02 DO YOU INSPECT FM TRANSMIT OR RECEIVE SYSTEMS	2	2	2	0	0	0
K 668 K2-03 DO YOU CLEAN FM TRANSMIT OR RECEIVE SYSTEMS	2	2	2	0	0	0
K 669 K2-04 DO YOU ALIGN FM TRANSMIT OR RECEIVE SYSTEMS	2	0	1	0	0	0
K 670 K2-05 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE SYSTEMS	2	2	2	0	0	0
K 671 K2-06 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE COMPONENTS	2	0	1	0	0	0
K 672 K2-07 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE SYSTEMS	2	2	2	0	0	0
K 673 K2-08 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE COMPONENTS	2	0	1	0	0	0
K 674 K2-09 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS	0	0	0	0	0	0
K 675 K2-10 DO YOU PERFORM TASKS ON FREQUENCY MULTIPLIERS	0	0	0	0	0	0

FM SYSTEMS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

	SPL	SPL	SPL	SPL	SPL	SPL
	032	033	034	035	036	037
K 676 K2-11 DO YOU PERFORM TASKS ON DRIVERS (INTERMEDIATE AMPLIFIERS)	1	0	1	0	0	0
K 677 K2-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS	1	0	1	0	0	0
K 678 K2-13 DO YOU PERFORM TASKS ON RF AMPLIFIERS	1	0	1	0	0	0
K 679 K2-14 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS	1	0	1	0	0	0
K 680 K2-15 DO YOU PERFORM TASKS ON IF AMPLIFIERS	1	0	1	0	0	0
K 681 K2-16 DO YOU PERFORM TASKS ON LIMITERS	1	0	1	0	0	0
K 682 K2-17 DO YOU PERFORM TASKS ON FREQUENCY DISCRIMINATORS	1	0	1	0	0	0
K 683 K2-18 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSMITTERS	2	2	2	0	0	0
K 684 K2-19 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM RECEIVERS	1	0	1	0	0	0
K 685 K3-01 DO YOU CONVERT DECIMAL (BASE 10) NUMBERS TO OCTAL (BASE 8) NUMBERS	1	0	2	0	0	0
K 686 K3-02 DO YOU CONVERT DECIMAL NUMBERS TO BINARY (BASE 2) NUMBERS	1	0	2	0	0	0
K 687 K3-03 DO YOU CONVERT OCTAL NUMBERS TO DECIMAL NUMBERS	1	0	1	0	0	0
K 688 K3-04 DO YOU CONVERT OCTAL NUMBERS TO BINARY NUMBERS	1	0	1	0	0	0
K 689 K3-05 DO YOU CONVERT BINARY NUMBERS TO DECIMAL NUMBERS	2	0	2	0	0	0
K 690 K3-06 DO YOU CONVERT BINARY NUMBERS TO OCTAL NUMBERS	1	0	1	0	0	0
K 691 K3-07 DO YOU ADD BINARY NUMBERS TO GET A SUM	4	0	3	0	0	0
K 692 K3-08 DO YOU SUBTRACT BINARY NUMBERS USING THE END-AROUND-CARRY METHOD	2	0	1	0	0	0
K 693 K3-09 DO YOU SUBTRACT BINARY NUMBERS USING THE DIRECT SUBTRACTION METHOD	4	0	3	0	0	0
K 694 K3-10 DO YOU ADD OCTAL NUMBERS TO GET A SUM	1	2	1	0	0	0
L 695 L1-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO LOGIC FUNCTIONS	3	7	4	8	0	7
L 696 L1-02 DO YOU CONSTRUCT TRUTH TABLES FOR AND LOGIC SYMBOLS OR GATES	2	5	3	8	0	0
L 697 L1-03 DO YOU CONSTRUCT TRUTH TABLES FOR OR LOGIC SYMBOLS OR GATES	1	5	2	8	0	0
L 698 L1-04 DO YOU CONSTRUCT TRUTH TABLES FOR AND OR LOGIC SYMBOLS WITH STATE INDICATORS	1	5	2	8	0	0
L 699 L1-05 DO YOU CONSTRUCT TRUTH TABLES FOR EXCLUSIVE OR LOGIC SYMBOLS OR GATES	1	5	2	8	0	0
L 700 L1-06 DO YOU USE OR REFER TO TRUTH TABLES FOR AND LOGIC SYMBOLS OR GATES	2	7	4	8	0	7
L 701 K1-07 DO YOU USE OR REFER TO TRUTH TABLES FOR OR LOGIC SYMBOLS OR GATES	2	7	4	8	0	7
L 702 K1-08 DO YOU USE OR REFER TO TRUTH TABLES FOR AND OR LOGIC SYMBOLS WITH STATE INDICATORS	2	7	4	8	0	7
L 703 L1-09 DO YOU USE OR REFER TO TRUTH TABLES FOR EXCLUSIVE OR LOGIC SYMBOLS	2	5	3	8	0	7
L 704 L1-10 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR AND GATES	3	7	4	8	0	7
L 705 L1-11 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR OR GATES	3	7	4	8	0	7
L 706 L1-12 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR NAND OR NOR GATES	3	7	4	8	0	7

NUMBERING SYSTEMS

LOGIC FUNCTIONS

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING

		01-TSK										SPL SPL SPL SPL SPL SPL 032 033 034 035 036 037									
L 707	L1-13 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR EXCLUSIVE OR GATES	3	5	4	8	0	7														
L 708	L2-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO BOOLEAN EQUATIONS, LOGIC DIAGRAMS, OR LOGIC	2	2	2	0	0	0														
L 709	L2-02 DO YOU DRAW LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUITS	1	0	1	0	0	0														
L 710	L2-03 DO YOU CONSTRUCT TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS	1	2	2	0	0	0														
L 711	L2-04 DO YOU DRAW LOGIC DIAGRAMS FROM GIVEN BOOLEAN EQUATIONS	1	0	1	0	0	0														
L 712	L2-05 DO YOU MEASURE INPUTS OR OUTPUTS OF LOGIC GATES	1	2	2	0	0	0														
L 713	L2-06 DO YOU DEVELOP OR ANALYZE BOOLEAN EQUATIONS IN THE PROCESS OF TROUBLESHOOTING DIGITAL CIRCUITS	0	0	0	0	0	0														
L 714	L2-07 DO YOU ANALYZE LOGIC CIRCUITS BY USING BOOLEAN ALGEBRA	0	0	1	0	0	0														
L 715	L2-08 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUIT GATES	0	0	1	0	0	0														
L 716	L2-09 DO YOU USE OR REFER TO TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS	0	0	1	0	0	0														
L 717	L2-10 DO YOU USE OR REFER TO LOGIC DIAGRAMS CONSISTING OF MORE THAN ONE GATE	0	2	1	0	0	0														
L 718	L2-11 DO YOU COMPUTE SUM AND CARRY EXPRESSIONS FOR SERIAL HALF OR FULL ADDER LOGIC DIAGRAMS	0	0	0	0	0	0														
L 719	L2-12 DO YOU TRACE DATA FLOW THROUGH PARALLEL FULL ADDER LOGIC DIAGRAMS	0	0	0	0	0	0														
L 720	L2-13 DO YOU WORK WITH ASTABLE (FREE RUNNING) MULTIVIBRATORS	0	0	1	0	0	0														
L 721	L2-14 DO YOU WORK WITH BISTABLE (FLIP-FLOP) MULTIVIBRATORS	0	0	1	0	0	0														
L 722	L2-15 DO YOU WORK WITH MONOSTABLE (ONE-SHOT) MULTIVIBRATORS	0	0	1	0	0	0														
L 723	L2-16 DO YOU USE OR REFER TO FLIP-FLOP MULTIVIBRATOR SYMBOLS	0	0	1	0	0	0														
L 724	L2-17 DO YOU USE OR REFER TO SINGLE-SHOT MULTIVIBRATOR SYMBOLS	0	0	1	0	0	0														
L 725	L2-18 DO YOU USE OR REFER TO FLIP-FLOP CIRCUIT DIAGRAMS	0	2	1	0	0	0														
L 726	L2-19 DO YOU USE OR REFER TO FLIP-FLOP TRUTH TABLES	0	2	1	0	0	0														
L 727	L2-20 DO YOU USE OR REFER TO COMPLEMENTED FLIP-FLOP LOGIC SYMBOLS	0	2	1	0	0	0														
L 728	L2-21 DO YOU USE OR REFER TO COMPLEMENTING FLIP-FLOP LOGIC SYMBOLS	0	0	1	0	0	0														
L 729	L2-22 DO YOU MEASURE OUTPUT WAVESHAPES OF LOGIC CIRCUITS	0	0	0	0	0	0														
L 730	L2-23 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTED FLIP-FLOP SCHEMATIC DIAGRAMS	0	0	0	0	0	0														
L 731	L2-24 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS	0	0	0	0	0	0														
L 732	L2-25 DO YOU CONSTRUCT TRUTH TABLES FOR J-K FLIP-FLOP LOGIC SYMBOLS	0	2	1	0	0	0														

BOOLEAN EQUATIONS

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY

PERCENT MEMBERS PERFORMING

		DY-TSK													
		SPL		SPL		SPL		SPL		SPL		SPL			
		032		033		034		035		036		037			
L 733 L3-01 DO YOU WORK WITH DIGITAL COUNTERS IN YOUR PRESENT JOB		16		13		15		15		18		7			
L 734 L3-02 DO YOU USE OR REFER TO UP-COUNTERS		2		0		2		8		0		0			
L 735 L3-03 DO YOU USE OR REFER TO DOWN-COUNTERS		0		0		1		8		0		0			
L 736 L3-04 DO YOU USE OR REFER TO SERIAL COUNTERS		3		5		4		0		0		0			
L 737 L3-05 DO YOU USE OR REFER TO PARALLEL COUNTERS		2		0		2		0		0		0			
L 738 L3-06 DO YOU USE OR REFER TO RING COUNTERS		0		0		1		0		0		0			
L 739 L3-07 DO YOU USE OR REFER TO DECADE COUNTERS		8		2		7		0		0		7			
L 740 L3-08 DO YOU USE OR REFER TO COUNT DETECT CIRCUITS		0		2		1		0		0		0			
L 741 L3-09 DO YOU USE OR REFER TO DOWN CLOCKS		1		0		1		0		0		0			
L 742 L3-10 DO YOU USE OR REFER TO UP CLOCKS		2		0		2		0		0		0			
L 743 L3-11 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-COUNTERS HAVING COMPLEMENTED FLIP-FLOPS		0		0		0		0		0		0			
L 744 L3-12 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SERIAL UP- OR DOWN-COUNTERS HAVING COMPLEMENTING FLIP-FLOPS		0		0		0		0		0		0			
L 745 L3-13 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DECADE COUNTERS		4		0		3		0		0		0			
L 746 L3-14 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF RING COUNTERS		0		0		0		0		0		0			
L 747 L3-15 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SERIAL UP-COUNTERS FEEDING A PARALLEL STORAGE REGISTER		0		0		0		0		0		0			
L 748 L3-16 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS		1		0		1		0		0		0			
L 749 L3-17 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF COUNTERS		0		2		1		0		0		0			
L 750 L3-18 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR UP-COUNTERS HAVING COMPLEMENTED FLIP-FLOPS		1		0		1		0		0		0			
L 751 L3-19 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR SERIAL UP- OR DOWN-COUNTERS HAVING COMPLEMENTED PULSES FOR SERIAL UP-COUNTERS FEEDING A PARALLEL STORAGE		0		0		0		0		0		0			
L 752 L3-20 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR SERIAL UP-COUNTERS FEEDING A PARALLEL STORAGE		0		0		0		0		0		0			
L 753 L3-21 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR OTHER TYPES OF COUNTERS		1		0		1		0		0		0			
L 754 L3-22 DO YOU CONSTRUCT TRUTH TABLES FROM LOGIC DIAGRAMS OF DECADE COUNTERS		0		0		0		0		0		0			
L 755 L3-23 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP IN RING COUNTERS FOR SPECIFIC INPUT PULSES		0		0		0		0		0		0			
L 756 L3-24 DO YOU DETERMINE THE APPROPRIATE AND GATE NECESSARY IN COUNT DETECT CIRCUITS TO INDICATE A REQUIRED COUNT		0		0		0		0		0		0			
M 757 M1-01 DO YOU WORK WITH SAWTOOTH WAVE GENERATORS		7		2		5		0		9		0			
M 758 M1-02 DO YOU WORK WITH TRAPEZOIDAL WAVE GENERATORS		2		0		1		0		0		0			
M 759 M1-03 DO YOU WORK WITH PULSED OSCILLATORS WITH REGENERATIVE FEEDBACK		4		5		4		0		9		7			
M 760 M1-04 DO YOU WORK WITH PULSED OSCILLATORS WITHOUT REGENERATIVE FEEDBACK		4		0		3		0		9		0			

COUNTERS

TIMING CIRCUITS

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

GP5M2A PAGE 75

TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING

0Y-TSK

	SPL	SPL	SPL	SPL	SPL	SPL
	032	033	034	035	036	037
M 761 M1-05 DO YOU WORK WITH BLOCKING OSCILLATORS	6	0	4	0	9	7
M 762 M1-06 DO YOU USE OR REFER TO RISE TIME	3	2	4	8	9	7
M 763 M1-07 DO YOU USE OR REFER TO FALL OR FLICKBACK TIME	2	5	3	8	9	7
M 764 M1-08 DO YOU USE OR REFER TO SHEEP TIME	11	20	13	15	18	7
M 765 M1-09 DO YOU USE OR REFER TO ELECTRICAL LENGTH OF SAWTOOTH	5	10	7	8	9	0
M 766 M1-10 DO YOU USE OR REFER TO PHYSICAL LENGTH OF SAWTOOTH	3	5	4	8	18	0
M 767 M1-11 DO YOU USE OR REFER TO LINEAR SLOPE OF SAWTOOTH	2	5	3	8	9	0
M 768 M1-12 DO YOU USE OR REFER TO GATE LENGTH OF SAWTOOTH	4	5	5	8	9	0
M 769 M2-01 DO YOU USE SIGNAL GENERATORS IN YOUR PRESENT JOB	30	47	34	69	45	21
M 770 M2-02 DO YOU PERFORM OPERATIONAL CHECKS WHILE USING SIGNAL GENERATORS	21	32	23	46	27	21
M 771 M2-03 DO YOU PERFORM PERIODIC MAINTENANCE SUCH AS ADJUSTING, ALIGNING, OR CALIBRATING WHILE USING SIGNAL GENERATORS	24	32	26	38	36	21
M 772 M2-04 DO YOU TROUBLESHOOT TO AN ASSEMBLY OR SUBASSEMBLY WHILE USING SIGNAL GENERATORS	13	15	13	31	27	21
M 773 M2-05 DO YOU TROUBLESHOOT TO THE SMALLEST REPLACEABLE COMPONENT WHILE USING SIGNAL GENERATORS	5	2	5	15	9	21
M 774 M2-06 DO YOU USE AUDIO SINE-WAVE GENERATORS	13	30	18	38	36	14
M 775 M2-07 DO YOU USE AUDIO NON-SINUSOIDAL WAVE GENERATORS SUCH AS SQUARE WAVE, TRIANGLE, PULSE, OR SPIKE	2	2	2	8	18	0
M 776 M2-08 DO YOU USE RF GENERATORS LESS THAN 1,000 MH	9	10	9	15	0	7
M 777 M2-09 DO YOU USE RF GENERATORS GREATER THAN 1,000 MH	12	10	11	15	9	7
M 778 M2-10 DO YOU USE OTHER SPECIAL PURPOSE OR MULTI-FUNCTION GENERATORS	7	7	7	31	18	7
M 779 M3-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH ALTERNATING CURRENT OR DIRECT CURRENT MOTORS OR	18	20	18	8	18	7
M 780 M3-02 DO YOU INSPECT MOTORS	10	13	10	8	9	14
M 781 M3-03 DO YOU CLEAN OR LUBRICATE MOTORS	9	15	10	8	18	7
M 782 M3-04 DO YOU OPERATE MOTORS	16	20	16	8	9	14
M 783 M3-05 DO YOU REMOVE OR REPLACE COMPLETE MOTORS	3	10	4	8	18	14
M 784 M3-06 DO YOU REMOVE OR REPLACE MOTOR PARTS	3	7	4	8	9	14
M 785 M3-07 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF MOTORS	5	7	5	8	18	14
M 786 M3-08 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF MOTORS	2	7	3	8	9	0
M 787 M3-09 DO YOU PERFORM ANY TASKS ON FIELD COILS	1	2	1	0	9	0
M 788 M3-10 DO YOU PERFORM ANY TASKS ON ARMATURES	1	2	1	0	9	0
M 789 M3-11 DO YOU PERFORM ANY TASKS ON ROTORS	1	0	1	0	9	0
M 790 M3-12 DO YOU PERFORM ANY TASKS ON BRUSHES	1	2	1	0	9	7
M 791 M3-13 DO YOU PERFORM ANY TASKS ON SLIP RINGS	1	0	1	0	0	0
M 792 M3-14 DO YOU PERFORM ANY TASKS ON COMMUTATORS	1	0	1	0	0	0
M 793 M3-15 DO YOU PERFORM ANY TASKS ON POLE PIECES	1	0	1	0	0	0

MOTORS AND GENERATORS

USE OF SIGNAL GENERATORS

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

GPSM2A PAGE 74

TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING

DY-TSK	SPL				SPL				METER MOVEMENTS
	032	033	034	035	036	037	038	039	
M 794 M3-14 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OF THE FORCE OR TORQUE CREATED BY A MOTOR	0	0	0	0	0	0	0	0	0
M 795 M3-17 DO YOU DETERMINE OR MEASURE THE DIRECTION OF THE MECHANICAL FORCE OR TORQUE CREATED BY A MOTOR	0	0	0	0	0	0	0	0	0
M 796 M3-18 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OR DIRECTION OF THE INDUCED VOLTAGE IN MOTORS	0	0	0	0	0	0	0	0	0
M 797 M3-19 DO YOU WORK WITH SYNCHRONOUS MOTORS	0	5	1	0	0	0	0	0	0
M 798 M3-20 DO YOU WORK WITH INDUCTION MOTORS	3	2	2	0	0	0	0	0	0
M 799 M3-21 DO YOU WORK WITH SPLIT-PHASE MOTORS	2	2	2	0	0	0	0	0	0
M 800 M3-22 DO YOU WORK WITH SOME COMBINATION OF THE ABOVE MOTORS	3	2	3	0	0	0	0	0	0
M 801 M3-23 DO YOU INSPECT GENERATORS	17	15	14	0	0	0	0	0	0
M 802 M3-24 DO YOU CLEAN OR LUBRICATE GENERATORS	7	7	7	0	0	0	0	0	0
M 803 M3-25 DO YOU OPERATE GENERATORS	17	20	17	0	0	0	0	0	0
M 804 M3-26 DO YOU REMOVE OR REPLACE COMPLETE GENERATORS	3	5	4	0	0	0	0	0	0
M 805 M3-27 DO YOU REMOVE OR REPLACE GENERATOR PARTS	3	0	2	0	0	0	0	0	0
M 806 M3-28 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF GENERATORS	5	0	4	0	0	0	0	0	0
M 807 M3-29 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF GENERATORS	3	2	2	0	0	0	0	0	0
N 808 N1-01 DO YOU WORK WITH METERS IN YOUR PRESENT JOB	54	47	53	31	64	36			
N 809 N1-02 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF PERMANENT MAGNETS	11	10	12	0	0	0			
N 810 N1-03 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF MOVING COILS	12	10	12	0	0	0			
N 811 N1-04 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF SPIRAL SPRINGS	13	7	12	0	0	0			
N 812 N1-05 DO YOU READ METER SCALES	52	50	52	31	55	36			
N 813 N1-06 DO YOU EXTEND THE RANGE OF AMMETERS	16	15	14	0	0	0			
N 814 N1-07 DO YOU ZERO OHMMETERS	52	50	52	31	55	36			
N 815 N1-08 DO YOU ZERO VOLTMETERS	27	22	27	0	18	21			
N 816 N1-09 DO YOU EXTEND THE RANGE OF VOLTMETERS	21	35	24	8	9	14			
N 817 N1-10 DO YOU USE OR REFER TO VOLTMEETER SENSITIVITY (EXPRESSED IN UNITS OF OHMS PER VOLT)	12	17	14	8	27	29			
N 818 N2-01 DO YOU WORK WITH SATURABLE REACTORS OR MAGNETIC AMPLIFIERS IN YOUR PRESENT JOB	1	0	1	0	0	0			
N 819 N2-02 DO YOU INSPECT MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	0			
N 820 N2-03 DO YOU CLEAN MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	0			
N 821 N2-04 DO YOU ADJUST MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	0			
N 822 N2-05 DO YOU TROUBLESHOOT MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	0			
N 823 N2-06 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	0			
N 824 N2-07 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIER OR SATURABLE REACTOR COMPONENTS	0	0	0	0	0	0			

SATURABLE REACTORS AND
MAGNETIC AMPLIFIERS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING	DY-15K					
	SPL	SPL	SPL	SPL	SPL	SPL
N 825 N2-08 DO YOU USE OR REFER TO HYSTERESIS CURVES OR LOOPS	0	0	0	0	0	0
N 826 N2-09 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT	0	0	0	0	0	0
N 827 N2-10 DO YOU MEASURE OUTPUT WAVEFORMS ACROSS REACTOR	0	0	0	0	0	0
N 828 N2-11 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT	0	0	0	0	0	0
N 829 N2-12 DO YOU USE OR REFER TO COERCITIVE FORCE IN SATURABLE REACTORS	0	0	0	0	0	0
N 830 N2-13 DO YOU USE OR REFER TO RESIDUAL MAGNETISM IN SATURABLE REACTORS	0	0	0	0	0	0
N 831 N2-14 DO YOU USE OR REFER TO FLUX DENSITY IN SATURABLE REACTORS	0	0	0	0	0	0
N 832 N2-15 DO YOU USE OR REFER TO POINT OF SATURATION IN SATURABLE REACTORS	0	0	0	0	0	0
N 833 N2-16 DO YOU USE OR REFER TO SATURABLE REACTOR SCHEMATIC SYMBOLS	0	0	0	0	0	0
N 834 N3-01 DO YOU WORK WITH WAVESHAPING CIRCUITS IN YOUR PRESENT JOB	2	0	1	0	9	7
N 835 N3-02 DO YOU USE OR REFER TO TRANSIENT INTERVALS	1	0	1	0	9	0
N 836 N3-03 DO YOU USE OR REFER TO PULSE WIDTH (PW)	2	0	1	0	9	7
N 837 N3-04 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)	1	0	1	0	9	7
N 838 N3-05 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)	1	0	1	0	9	7
N 839 N3-06 DO YOU USE OR REFER TO DIFFERENTIATING CIRCUITS	1	0	1	0	9	0
N 840 N3-07 DO YOU USE OR REFER TO INTEGRATING CIRCUITS	0	0	0	0	9	0
N 841 N3-08 DO YOU USE OR REFER TO THE CLASSIFICATION OF TIME CONSTANTS (TC) AS LONG, MEDIUM, OR SHORT	1	0	1	0	9	0
N 842 N3-09 DO YOU DETERMINE WHETHER AN LR OR RC CIRCUIT IS DIFFERENTIATING OR INTEGRATING BASED ON THE TIME CONSTANT	0	0	0	0	9	0
N 843 N3-10 DO YOU WORK WITH SQUARE WAVE GENERATORS	0	0	0	0	0	0
N 844 N3-11 DO YOU WORK WITH RECTANGULAR WAVE GENERATORS	0	0	0	0	0	0
N 845 N3-01 DO YOU WORK ON SINGLE SIDEBAND SYSTEMS IN YOUR PRESENT JOB	1	0	1	0	0	0
N 846 N3-02 DO YOU INSPECT SSB TRANSMIT OR RECEIVE SYSTEMS	1	0	1	0	0	0
N 847 N3-03 DO YOU CLEAN SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
N 848 N3-04 DO YOU ALIGN SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
N 849 N3-05 DO YOU TROUBLESHOOT TO SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
N 850 N3-06 DO YOU TROUBLESHOOT TO SSB TRANSMIT OR RECEIVE COMPONENTS	0	0	0	0	0	0
N 851 N3-07 DO YOU REMOVE OR REPLACE SSB TRANSMIT OR RECEIVE SYSTEMS	1	0	1	0	0	0
N 852 N3-08 DO YOU REMOVE OR REPLACE SSB TRANSMIT OR RECEIVE COMPONENTS	0	0	0	0	0	0

WAVESHAPING CIRCUITS

SINGLE SIDEBAND SYSTEMS

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY

PERCENT MEMBERS PERFORMING

DY-TSK													
		SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL
		032	033	034	035	036	037						
0 853	01-09 DO YOU PERFORM TASKS ON SSB AUDIO AMPLIFIERS	0	0	0	0	0	0						
0 854	01-10 DO YOU PERFORM TASKS ON SSB BALANCED MODULATORS	0	0	0	0	0	0						
0 855	01-11 DO YOU PERFORM TASKS ON SSB CARRIER OSCILLATORS	0	0	0	0	0	0						
0 856	01-12 DO YOU PERFORM TASKS ON SSB LC FILTERS	0	0	0	0	0	0						
0 857	01-13 DO YOU PERFORM TASKS ON SSB CRYSTAL FILTERS	0	0	0	0	0	0						
0 858	01-14 DO YOU PERFORM TASKS ON SSB MECHANICAL FILTERS	0	0	0	0	0	0						
0 859	01-15 DO YOU PERFORM TASKS ON SSB OSCILLATORS	0	0	0	0	0	0						
0 860	01-16 DO YOU PERFORM TASKS ON SSB MIXERS	0	0	0	0	0	0						
0 861	01-17 DO YOU PERFORM TASKS ON SSB DRIVERS	0	0	0	0	0	0						
0 862	01-18 DO YOU PERFORM TASKS ON SSB POWER AMPLIFIERS	0	0	0	0	0	0						
0 863	01-19 DO YOU PERFORM TASKS ON SSB RF AMPLIFIERS	0	0	0	0	0	0						
0 864	01-20 DO YOU PERFORM TASKS ON SSB FREQUENCY CONVERTERS	0	0	0	0	0	0						
0 865	01-21 DO YOU PERFORM TASKS ON SSB IF AMPLIFIERS	0	0	0	0	0	0						
0 866	01-22 DO YOU PERFORM TASKS ON SSB DEMODULATORS	0	0	0	0	0	0						
0 867	01-23 DO YOU PERFORM TASKS ON SSB DON'T REMEMBER WHICH SSB	0	0	0	0	0	0						
SYSTEM STAGES													
0 868	01-24 DO YOU USE OR REFER TO SELECTIVE FADING	0	0	0	0	0	0						
0 869	01-25 DO YOU USE OR REFER TO PEAK POWER	0	0	0	0	0	0						
0 870	01-26 DO YOU USE OR REFER TO FREQUENCY STABILITY	0	0	0	0	0	0						
0 871	01-27 DO YOU USE OR REFER TO RESPONSE CURVES FOR BANDWIDTH FILTERS	0	0	0	0	0	0						
0 872	01-28 DO YOU CALCULATE PEAK POWER OR EFFECTIVE POWER OF SSB TRANSMITTERS	0	0	0	0	0	0						
0 873	01-29 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB TRANSMITTER SCHEMATIC DIAGRAMS	0	0	0	0	0	0						
0 874	01-30 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB RECEIVER SCHEMATIC DIAGRAMS	0	0	0	0	0	0						
0 875	02-01 DO YOU WORK ON PULSE MODULATION SYSTEMS IN YOUR PRESENT JOB	0	0	0	0	8	9	7					
0 876	02-02 DO YOU INSPECT PULSE MODULATION SYSTEMS	0	0	0	0	0	9	7					
0 877	02-03 DO YOU CLEAN PULSE MODULATION SYSTEMS	0	0	0	0	0	9	0					
0 878	02-04 DO YOU ALIGN PULSE MODULATION SYSTEMS	0	0	0	0	8	9	0					
0 879	02-05 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEMS	0	0	0	0	0	9	7					
0 880	02-06 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEM COMPONENTS	0	0	0	0	0	9	7					
0 881	02-07 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEMS	0	0	0	0	8	9	0					
0 882	02-08 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEM COMPONENTS	0	0	0	0	0	9	7					
0 883	02-09 DO YOU WORK ON PULSE-AMPLITUDE MODULATION (PAM) SYSTEMS	0	0	0	0	0	9	0					
0 884	02-10 DO YOU WORK ON PULSE-DURATION MODULATION (PDM) SYSTEMS	0	0	0	0	0	0	0					
0 885	02-11 DO YOU WORK ON PULSE-POSITION MODULATION (PPM) SYSTEMS	0	0	0	0	0	0	0					
0 886	02-12 DO YOU WORK ON PULSE-CODE MODULATION (PCM) SYSTEMS	0	0	0	0	0	0	0					
0 887	02-13 DO YOU WORK ON LINE PULSING MODULATION SYSTEMS	0	0	0	0	0	0	0					
0 888	02-14 DO YOU WORK ON DON'T REMEMBER WHICH TYPE OF MODULATION SYSTEM	0	0	0	0	0	0	0					

PULSE MODULATION SYSTEMS

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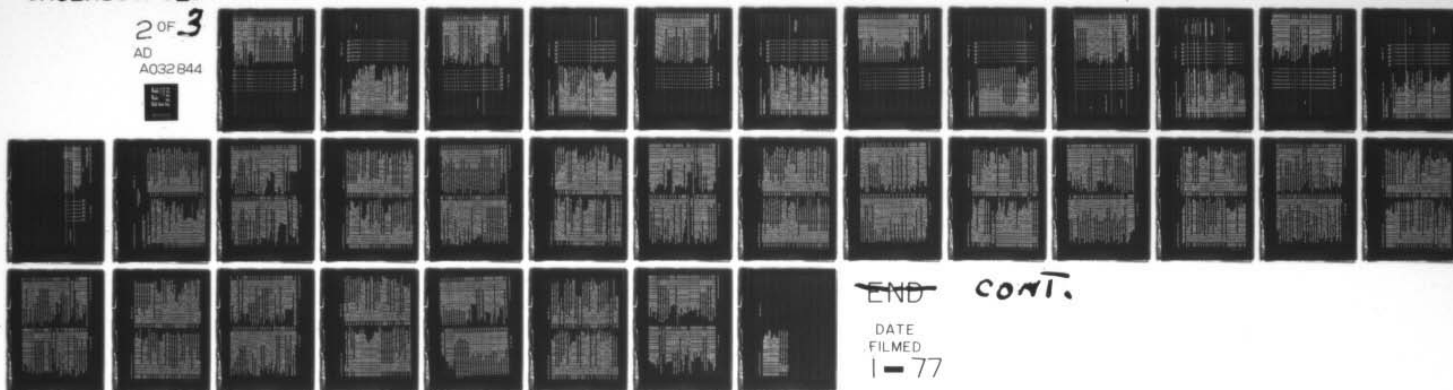
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PERCENT MEMBERS PERFORMING TASKS BY APMS GROUPS

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TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DT-TSK	SPL SPL SPL SPL SPL SPL SPL SPL SPL SPL									
	032	033	034	035	036	037	038	039	040	041
0 009 02-15 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	0	2	1	0	0	0	0	0	0	0
POWER SUPPLIES										
0 090 02-16 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	0	0	0	0	0	0	0	0	0	0
CHANGING CHOICES AND CHARGING DIODES										
0 091 02-17 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	0	0	0	0	0	0	0	0	0	0
PULSE FORMING NETWORKS										
0 092 02-18 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	0	0	0	0	0	0	0	0	0	0
TIMERS										
0 093 02-19 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	0	0	0	0	0	0	0	0	0	0
SWITCHES SUCH AS GAS THYRATRON										
0 094 02-20 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	0	0	0	0	0	0	0	0	0	0
PULSE TRANSFORMERS										
0 095 02-21 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	0	0	0	0	0	0	0	0	0	0
TRANSMITTER TUBES										
0 096 02-22 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM RF	0	0	0	0	0	0	0	0	0	0
AMPLIFIERS										
0 097 02-23 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	0	0	0	0	0	0	0	0	0	0
FREQUENCY CONVERTERS										
0 098 02-24 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	0	0	0	0	0	0	0	0	0	0
IF AMPLIFIERS										
0 099 02-25 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	0	0	0	0	0	0	0	0	0	0
DETECTIONS										
0 900 02-26 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	0	0	0	0	0	0	0	0	0	0
VIDEO AMPLIFIERS										
0 901 02-27 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	0	0	0	0	0	0	0	0	0	0
POWER VIDEO AMPLIFIERS										
0 902 02-28 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM	0	0	0	0	0	0	0	0	0	0
DON'T REMEMBER WHICH PULSE MODULATION SYSTEM STAGES										
0 903 02-29 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)	0	0	0	0	0	0	0	0	0	0
0 904 02-30 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)	0	0	0	0	0	0	0	0	0	0
0 905 02-31 DO YOU USE OR REFER TO PULSE WIDTH (PW)	0	0	0	0	0	0	0	0	0	0
0 906 02-32 DO YOU USE OR REFER TO PULSE SHAPE	0	0	0	0	0	0	0	0	0	0
0 907 02-33 DO YOU USE OR REFER TO PULSE POWER	0	0	0	0	0	0	0	0	0	0
0 908 02-34 DO YOU USE OR REFER TO AVERAGE POWER	0	0	0	0	0	0	0	0	0	0
0 909 02-35 DO YOU CALCULATE PULSE RECURRENCE TIME (PRT) ON PULSE RECURRENCE FREQUENCY (PRF)	0	0	0	0	0	0	0	0	0	0
0 910 02-36 DO YOU MEASURE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)	0	0	0	0	0	0	0	0	0	0
0 911 02-37 DO YOU USE FORMULAS TO CALCULATE AVERAGE POWER OR PEAK POWER OF PULSE MODULATION TRANSMIT SYSTEMS	0	0	0	0	0	0	0	0	0	0
0 912 02-38 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION TRANSMITTER SCHEMATIC DIAGRAMS	0	0	0	0	0	0	0	0	0	0
0 913 02-39 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION RECEIVER SCHEMATIC DIAGRAMS	0	0	0	0	0	0	0	0	0	0
0 914 03-01 DO YOU WORK WITH ANTENNAS IN YOUR PRESENT JOB	20	30	30	30	0	10	10	10	10	10
0 915 03-02 DO YOU INSPECT ANTENNAS	23	30	27	0	0	10	10	10	10	10

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY

PERCENT MEMBERS PERFORMING

	DY-TSK									
	SPL 032	SPL 033	SPL 034	SPL 035	SPL 036	SPL 037	SPL 038	SPL 039	SPL 040	SPL 041
0 914 03-03 DO YOU CLEAN ANTENNAS	25	40	29	8	18	7				
0 917 03-04 DO YOU PHYSICALLY ALIGN ANTENNAS	13	20	15	0	18	0				
0 918 03-05 DO YOU ELECTRICALLY ALIGN ANTENNAS	10	5	9	0	9	0				
0 919 03-06 DO YOU TROUBLESHOOT TO ANTENNAS	11	17	12	0	18	0				
0 920 03-07 DO YOU TROUBLESHOOT TO ANTENNA COMPONENTS	6	7	6	0	0	0				
0 921 03-08 DO YOU REMOVE OR INSTALL ANTENNAS	24	35	27	8	9	7				
0 922 03-09 DO YOU REMOVE OR REPLACE COMPONENTS OF ANTENNAS	3	10	5	0	0	0				
0 923 03-10 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF E OR ELECTRIC FIELD LINES	0	0	0	0	0	0				
0 924 03-11 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF H OR MAGNETIC FIELD LINES	0	0	0	0	0	0				
0 925 03-12 DO YOU DETERMINE THE DIRECTION OF THE MAGNETIC LINES IN RELATION TO THE ELECTRIC LINES OF FORCE FOR ANTENNAS	0	0	0	0	0	0				
0 926 03-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE OF CORRECT LENGTH (HALF-WAVE) ACT AS	0	0	0	0	0	0				
0 927 03-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE LONGER THAN A HALF-WAVE ACT AS INDUCTIVE LOADS	0	0	0	0	0	0				
0 928 03-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE SHORTER THAN A HALF-WAVE ACT AS CAPACITIVE LOADS	0	0	0	0	0	0				
0 929 03-16 DO YOU WORK WITH WERTZ ANTENNAS	2	2	2	8	0	0				
0 930 03-17 DO YOU WORK WITH MARCONI ANTENNAS	1	0	1	0	0	0				
0 931 03-18 DO YOU WORK WITH BROADSIDE ARRAYS	0	0	0	0	0	0				
0 932 03-19 DO YOU WORK WITH END-FIRE ARRAYS	0	0	0	0	0	0				
0 933 03-20 DO YOU WORK WITH CARDIOID ARRAYS	0	0	0	0	0	0				
0 934 03-21 DO YOU WORK WITH COLLINER ARRAYS	1	0	1	0	0	0				
0 935 03-22 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC INDUCTION FIELDS WHEN WORKING WITH ANTENNAS	0	0	0	0	0	0				
0 936 03-23 DO YOU MEASURE ELECTROMAGNETIC INDUCTION FIELDS OF ANTENNAS	0	0	0	0	0	0				
0 937 03-24 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC RADIATION FIELDS WHEN WORKING WITH ANTENNAS	0	0	0	0	0	9				
0 938 03-25 DO YOU MEASURE ELECTROMAGNETIC RADIATION FIELDS OF ANTENNAS	0	0	0	0	0	0				
0 939 03-26 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA RADIATION	0	0	0	0	0	0				
0 940 03-27 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA INDUCTION FIELD	0	0	0	0	0	0				
0 941 03-28 ARE ANY OF THE ANTENNAS YOU WORK ON LINEARLY POLARIZED	2	2	2	0	0	0				
0 942 03-29 ARE ANY OF THE ANTENNAS YOU WORK ON CIRCULARLY POLARIZED	0	2	1	0	9	7				
0 943 03-30 DO YOU MEASURE OR DETERMINE THE POLARITY OF ANTENNAS YOU WORK ON	0	0	0	0	0	9				
0 944 03-31 DO YOU CONSTRUCT, OR MAKE THE CALCULATIONS NECESSARY TO CONSTRUCT, ANTENNAS OF CORRECT LENGTH FOR	0	0	0	0	0	0				

ANTENNAS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	SPL	SPL	SPL	SPL	SPL	SPL
	032	033	039	035	026	037
0 945 03-32 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS	1	0	1	0	9	0
0 946 03-33 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS DIRECTORS	0	0	0	0	0	0
0 947 03-34 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS REFLECTORS	0	0	0	0	9	0
0 948 03-35 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN DONT REMEMBER WHAT KIND OF ELEMENTS	11	17	13	8	0	0
0 949 03-36 DO YOU WORK ON UNIDIRECTIONAL ANTENNAS	6	7	7	8	9	0
0 950 03-37 DO YOU WORK ON BIDIRECTIONAL ANTENNAS	1	5	2	0	0	0
0 951 03-38 DO YOU WORK ON DONT REMEMBER THE DIRECTIONALITY	10	7	10	0	0	0
0 952 03-39 DO YOU WORK WITH ROTAR ANTENNA ARRAYS	1	0	1	0	0	0
0 953 03-40 IN YOUR PRESENT JOB DO YOU WORK WITH TRANSMISSION LINES (TRANSMISSION LINES ARE DEFINED TO INCLUDE LEADS	3	5	3	0	0	0
0 954 03-41 DO YOU REFER TO OR USE SKIN EFFECTS OF HIGH FREQUENCY TRANSMISSION LINES	0	0	0	0	0	0
0 955 03-42 DO YOU REFER TO OR USE RADIATION LOSS IN TRANSMISSION CURRENTS IN TRANSMISSION LINES	0	0	0	0	0	0
0 956 03-43 DO YOU REFER TO OR USE RADIATION LOSS IN TRANSMISSION LINES	0	0	0	0	0	0
0 957 03-44 DO YOU USE OR REFER TO DIELECTRIC LOSS IN TRANSMISSION LINES	0	2	1	0	0	0
0 958 03-45 DO YOU USE OR REFER TO LEAKAGE LOSSES IN TRANSMISSION LINES	0	2	1	0	0	0
0 959 03-46 DO YOU WORK WITH TWISTED PAIR TRANSMISSION LINES	0	2	1	0	0	0
0 960 03-47 DO YOU WORK WITH TWIN LEAD TRANSMISSION LINES	0	2	1	0	0	0
0 961 03-48 DO YOU WORK WITH OPEN TWO-WIRE TRANSMISSION LINES	0	2	1	0	0	0
0 962 03-49 DO YOU WORK WITH FLEXIBLE COAXIAL CABLE TRANSMISSION LINES	3	2	2	0	0	0
0 963 03-50 DO YOU WORK WITH RIGID COAXIAL CABLE TRANSMISSION LINES	1	0	1	0	0	0
0 964 03-51 DO YOU TROUBLESHOOT TRANSMISSION LINES	1	2	1	0	0	0
0 965 03-52 DO YOU ANALYZE VOLTAGE OR CURRENT WAVEFORMS IN TRANSMISSION LINES TO DETERMINE THE TYPE OF TERMINATION	0	0	0	0	0	0
0 966 03-53 DO YOU SELECT APPROPRIATE TRANSMISSION LINES	0	0	0	0	0	0
0 967 03-54 DO YOU USE OR REFER TO DESIRED WAVEFORMS	0	0	0	0	0	0
0 968 03-55 DO YOU USE OR REFER TO SCHEMATIC SYMBOLS FOR LINE TERMINATIONS IN TERMS OF CIRCUIT TERMINATIONS	0	0	0	0	0	0
0 969 03-56 DO YOU MEASURE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES	0	0	0	0	0	0
0 970 03-57 DO YOU CALCULATE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES	0	0	0	0	0	0
0 971 03-58 DO YOU PERFORM THE CALCULATIONS NECESSARY TO DETERMINE THE IMPEDANCE AND LENGTH OF QUARTER - WAVELENGTH	0	0	0	0	0	0

PERCENT MEMBERS PERFORMING TASKS BY APMS GROUPS

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TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING

BY-TSK
SPL SPL SPL SPL SPL
032 033 034 035 036 037

P 971 P1-19 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING MATCHING TRANSFORMERS	0	0	0	0	0	0	0	0	0
P 972 P1-20 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING DELTA MATCHING	0	0	0	0	0	0	0	0	0
P 973 P1-21 DO YOU SELECT THE TYPE OF TRANSMISSION LINE NEEDED FOR PARTICULAR JOBS WITHOUT REFERRING TO TECHNICAL DATA	0	0	0	0	0	0	0	0	0
P 974 P1-22 DO YOU USE OR REFER TO THE TERM CHARACTERISTIC IMPEDANCE (Z0) OF TRANSMISSION LINES	0	0	0	0	0	0	0	0	0
P 975 P1-23 DO YOU CALCULATE THE CHARACTERISTIC IMPEDANCE (Z0) OF TRANSMISSION LINES	0	0	0	0	0	0	0	0	0
P 976 P1-24 DO YOU USE OR REFER TO THE TERM CUTOFF FREQUENCY OF TRANSMISSION LINES	0	0	0	0	0	0	0	0	0
P 977 P1-25 DO YOU USE OR REFER TO THE TERM VELOCITY FACTOR (K) OF TRANSMISSION LINES	0	0	0	0	0	0	0	0	0
P 978 P1-26 DO YOU COMPUTE THE ELECTRICAL LENGTH OF TRANSMISSION LINES FOR PARTICULAR FREQUENCIES	0	0	0	0	0	0	0	0	0
P 979 P1-27 DO YOU CONSTRUCT TRANSMISSION LINES OF PARTICULAR ELECTRICAL LENGTH FOR GIVEN FREQUENCIES	0	0	0	0	0	0	0	0	0
P 980 P1-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT AS THE FREQUENCY INCREASES AND THE PHYSICAL LENGTH OF TRANSMISSION LINES	0	0	0	0	0	0	0	0	0
P 981 P1-29 DO YOU WORK WITH NONRESONANT (FLAT) TRANSMISSION LINES	0	0	0	0	0	0	0	0	0
P 982 P1-30 DO YOU WORK WITH RESONANT TRANSMISSION LINES	0	0	0	0	0	0	0	0	0
P 983 P1-31 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING STUB MATCHING	0	0	0	0	0	0	0	0	0
P 984 P2-01 DO YOU WORK WITH WAVEGUIDES OR CAVITY RESONATORS IN YOUR PRESENT JOB	15	25	17	23	10	21			
P 985 P2-02 DO YOU INSPECT WAVEGUIDES OR CAVITY RESONATORS	14	22	16	15	18	21			
P 986 P2-03 DO YOU CLEAN WAVEGUIDES OR CAVITY RESONATORS	12	25	15	15	18	14			
P 987 P2-04 DO YOU BEND WAVEGUIDES OR CAVITY RESONATORS	3	5	4	8	0	7			
P 988 P2-05 DO YOU TWIST WAVEGUIDES OR CAVITY RESONATORS	2	0	1	8	0	7			
P 989 P2-06 DO YOU PRESSURIZE WAVEGUIDES OR CAVITY RESONATORS	0	0	0	8	0	0			
P 990 P2-07 DO YOU PURGE WAVEGUIDES OR CAVITY RESONATORS	8	10	9	15	9	7			
P 991 P2-08 DO YOU TROUBLESHOOT WAVEGUIDES OR CAVITY RESONATORS	3	5	3	8	9	0			
P 992 P2-09 DO YOU REMOVE OR INSTALL COMPLETE WAVEGUIDES	13	20	15	15	18	7			
P 993 P2-10 DO YOU REMOVE OR INSTALL WAVEGUIDE SECTIONS	4	5	4	15	9	7			
P 994 P2-11 DO YOU REMOVE OR INSTALL DUMMY LOADS	5	0	4	8	9	0			
P 995 P2-12 DO YOU REMOVE OR INSTALL E BENDS	0	0	0	8	0	0			
P 996 P2-13 DO YOU REMOVE OR INSTALL M BENDS	0	0	0	8	0	0			
P 997 P2-14 DO YOU REMOVE OR INSTALL OTHER BENDS	0	0	0	8	0	0			
P 998 P2-15 DO YOU REMOVE OR INSTALL CHOKE JOINTS	0	0	0	8	0	0			
P 999 P2-16 DO YOU REMOVE OR INSTALL ROTATING JOINTS	0	0	0	8	0	0			
P1000 P2-17 DO YOU REMOVE OR INSTALL DIRECTIONAL COUPLERS	0	0	0	8	0	0			
P1001 P2-18 DO YOU REMOVE OR INSTALL BIDIRECTIONAL COUPLERS	0	0	0	8	0	0			
P1002 P2-19 DO YOU USE OR REFER TO "A" WALL OF WAVEGUIDES	0	0	0	8	0	0			

WAVEGUIDES AND CAVITY RESONATORS

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

CPMNA PAGE 03

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

SPL SPL SPL SPL SPL SPL
032 033 034 035 036 037

P1003 P2-20 DO YOU USE OR REFER TO "B" WALL OF WAVEGUIDES	0	0	0	0	0	0
P1004 P2-21 DO YOU USE OR REFER TO CUTOFF FREQUENCY OF WAVEGUIDES	0	0	0	0	0	0
P1005 P2-22 DO YOU USE OR REFER TO FREQUENCY-DETERMINING WALL OF WAVEGUIDES	0	0	0	0	0	0
P1006 P2-23 DO YOU USE OR REFER TO POWER-DETERMINING WALL OF WAVEGUIDES	0	0	0	0	0	0
P1007 P2-24 DO YOU USE OR REFER TO ELECTRIC FIELD BOUNDARY CONDITIONS	0	0	0	0	0	0
P1008 P2-25 DO YOU USE OR REFER TO MAGNETIC FIELD BOUNDARY CONDITIONS	0	0	0	0	0	0
P1009 P2-26 DO YOU USE OR REFER TO DUPLEXER FIELD BOUNDARY CONDITIONS	0	0	0	0	0	0
P1010 P2-27 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST WAVEGUIDES ARE MADE WITH A "B" WALL SIZE OF .7 WAVELENGTHS	0	0	0	0	0	0
P1011 P2-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST "A" WALLS RANGE FROM .2 TO .5 WAVELENGTHS IN SIZE, WITH .35	0	0	0	0	0	0
P1012 P2-29 ARE YOU CONCERNED WITH THE MATERIAL (SUCH AS BRASS) WHICH WAVEGUIDES ARE MADE OF	0	0	0	0	0	0
P1013 P2-30 DO YOU COMPUTE THE LENGTH OF A WAVEGUIDE FOR SPECIFIC INSTALLATION	0	0	0	0	0	0
P1014 P2-31 DO YOU USE THE RIGHT HAND RULE TO DETERMINE THE DIRECTION OF PROPAGATION, DIRECTION OF "E" FIELD, OR	0	0	0	0	0	0
P1015 P2-32 DO YOU USE OR REFER TO THE TIME PHASE OF PEAK "E" OR "H" LINES IN WAVEGUIDES	0	0	0	0	0	0
P1016 P2-33 DO YOU MEASURE THE TIME PHASE OF "E" OR "H" LINES IN WAVEGUIDES	0	0	0	0	0	0
P1017 P2-34 DO YOU USE OR REFER TO THE SPACE QUADRATURE OF "E" OR "H" LINES IN WAVEGUIDES	0	0	0	0	0	0
P1018 P2-35 ARE HIGH POWER PROBES USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	0	0	0	0	0
P1019 P2-36 ARE LOW POWER PROBES USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	0	0	0	0	0
P1020 P2-37 ARE LOOPS USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	0	0	0	0	0
P1021 P2-38 ARE APERTURES (WINDOWS OR IRISES) USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	2	5	2	15	9	21
P1022 P2-39 ARE DON'T REMEMBER THE KIND OF ENERGY COUPLING USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	2	5	2	0	0	0
P1023 P2-40 DO YOU DETERMINE WHERE PROBES SHOULD BE MOUNTED IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO	0	0	0	0	0	0
P1024 P2-41 DO YOU DETERMINE THE POSITIONING OF LOOPS IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO	0	0	0	0	0	0

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

SPL SPL SPL SPL SPL
032 033 034 035 036 037

P1025 P2-42 DO YOU DETERMINE THE POSITIONING OR SIZE OF APERTURES
IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO

P1026 P2-43 ARE CMOKE JOINTS USED IN WAVEGUIDES OR CAVITY

P1027 P2-44 ARE ROTATING JOINTS USED IN WAVEGUIDES OR CAVITY

P1028 P2-45 ARE DON'T REMEMBER THE KIND OF JOINTS USED IN

P1029 P2-46 DO YOU TUNE CAVITY RESONATORS USING CAPACITIVE TUNING

P1030 P2-47 DO YOU TUNE CAVITY RESONATORS USING INDUCTIVE TUNING

P1031 P2-48 DO YOU TUNE CAVITY RESONATORS USING VOLUME TUNING

P1032 P2-49 DO YOU TUNE CAVITY RESONATORS USING DON'T REMEMBER

P1033 P2-50 DO YOU MEASURE THE FREQUENCY OF SIGNALS IN CAVITY

P1034 P2-51 IN YOUR PRESENT JOB DO YOU WORK WITH KLYSTRONS,

P1035 P3-02 DO YOU USE OR REFER TO INTERELECTRODE CAPACITANCE

P1036 P3-03 DO YOU USE OR REFER TO ELECTRON TRANSIT TIME

P1037 P3-04 DO YOU USE OR REFER TO LEAD INDUCTANCE

P1038 P3-05 DO YOU USE OR REFER TO RF LOSSES IN EXTERNAL

P1039 P3-06 DO YOU USE OR REFER TO PRINCIPLE OF ELECTRON VELOCITY

P1040 P3-07 DO YOU USE OR REFER TO ELECTRON BUNCHING

P1041 P3-08 DO YOU WORK WITH TWO-CAVITY KLYSTRONS

P1042 P3-09 DO YOU WORK WITH THREE-CAVITY KLYSTRONS

P1043 P3-10 DO YOU WORK WITH REFLEX KLYSTRONS

P1044 P3-11 DO YOU WORK WITH TRAVELING-WAVE TUBES (TWT)

P1045 P3-12 DO YOU WORK WITH NONDEGENERATIVE PARAMETRIC

P1046 P3-13 DO YOU WORK WITH UP-CONVERTER PARAMETRIC AMPLIFIERS

P1047 P3-14 DO YOU WORK WITH MAGNETRONS

P1048 P3-15 DO YOU INSPECT KLYSTRONS OR TWT

P1049 P3-16 DO YOU CLEAN KLYSTRONS OR TWT

P1050 P3-17 DO YOU TUNE KLYSTRONS OR TWT ELECTRICALLY

P1051 P3-18 DO YOU TUNE KLYSTRONS OR TWT MECHANICALLY

P1052 P3-19 DO YOU PERFORM OPERATIONAL CHECKS OF KLYSTRONS OR

P1053 P3-20 DO YOU TROUBLESHOOT KLYSTRONS OR TWT

P1054 P3-21 DO YOU REMOVE OR REPLACE COMPLETE KLYSTRON OR TWT

P1055 P3-22 DO YOU REMOVE OR REPLACE KLYSTRON OR TWT COMPONENTS

P1056 P3-23 DO YOU INSPECT PARAMETRIC AMPLIFIERS

P1057 P3-24 DO YOU CLEAN PARAMETRIC AMPLIFIERS

P1058 P3-25 DO YOU ADJUST PARAMETRIC AMPLIFIERS

MICROWAVE AMPLIFIERS
AND OSCILLATORS

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING

		DY-TSK						
		SPL	SPL	SPL	SPL	SPL	SPL	SPL
		032	033	034	035	036	037	
P1069 P3-26 DO YOU TUNE PARAMETRIC AMPLIFIERS		0	0	0	0	0	0	0
P1060 P3-27 DO YOU PERFORM OPERATIONAL CHECKS OF PARAMETRIC AMPLIFIERS		0	0	0	0	0	0	0
P1061 P3-28 DO YOU TROUBLESHOOT PARAMETRIC AMPLIFIERS		0	0	0	0	0	0	0
P1062 P3-29 DO YOU REMOVE OR REPLACE COMPLETE PARAMETRIC AMPLIFIER		0	0	0	0	0	0	0
P1063 P3-30 DO YOU REMOVE OR REPLACE PARAMETRIC AMPLIFIER COMPONENTS		0	0	0	0	0	0	0
P1064 P3-31 DO YOU INSPECT MAGNETRONS		0	0	0	0	0	0	0
P1065 P3-32 DO YOU CLEAN MAGNETRONS		0	0	0	0	0	0	0
P1066 P3-33 DO YOU ADJUST MAGNETRONS		0	0	0	0	0	0	0
P1067 P3-34 DO YOU TUNE MAGNETRONS		0	0	0	0	0	0	0
P1068 P3-35 DO YOU PERFORM OPERATIONAL CHECKS OF MAGNETRONS		0	0	0	0	0	0	0
P1069 P3-36 DO YOU TROUBLESHOOT MAGNETRONS		0	0	0	0	0	0	0
P1070 P3-37 DO YOU REMOVE OR REPLACE COMPLETE MAGNETRON		0	0	0	0	0	0	0
P1071 P3-38 DO YOU REMOVE OR REPLACE MAGNETRON COMPONENTS		0	0	0	0	0	0	0
P1072 P3-39 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS COLLECTOR PLATES		0	0	0	0	0	0	0
P1073 P3-40 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATCHER CAVITIES		0	0	0	0	0	0	0
P1074 P3-41 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATCHER GRIDS		0	0	0	0	0	0	0
P1075 P3-42 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS FEEDBACK LOOPS		0	0	0	0	0	0	0
P1076 P3-43 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS DRIFT SPACES		0	0	0	0	0	0	0
P1077 P3-44 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS BUNCHER GRIDS		0	0	0	0	0	0	0
P1078 P3-45 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS BUNCHER CAVITIES		0	0	0	0	0	0	0
P1079 P3-46 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CONTROL GRIDS		0	0	0	0	0	0	0
P1080 P3-47 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATHODES		0	0	0	0	0	0	0
P1081 P3-48 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON REFLECTOR (REFLECTOR) PLATES		1	0	1	0	0	0	14
P1082 P3-49 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON GRIDS		1	0	1	0	0	0	7
P1083 P3-50 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON GRID CAVITY GAPS		1	0	1	0	0	0	7
P1084 P3-51 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON RESONANT CAVITIES		1	0	1	0	0	0	14
P1085 P3-52 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON MAGNETIC COUPLING LOOPS		1	0	1	0	0	0	0
P1086 P3-53 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON FILAMENTS		1	0	1	0	0	0	7
P1087 P3-54 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON CATHODES		1	0	1	0	0	0	7

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING

DY-TSK	SPL				SPL				SPL			
	032	033	034	035	032	033	034	035	032	033	034	037
P1088 P3-55 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON OUTPUT LEADS	2	2	2	0	0	0	0	0	7			
P1089 P3-56 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES FILAMENTS	1	0	1	0	0	0	0	0	0			
P1090 P3-57 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES CATHODES	1	0	1	0	0	0	0	0	0			
P1091 P3-58 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES MODULATOR GRIDS	1	0	1	0	0	0	0	0	0			
P1092 P3-59 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES ANODES	1	0	1	0	0	0	0	0	0			
P1093 P3-60 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES HELICES	1	0	1	0	0	0	0	0	0			
P1094 P3-61 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES COLLECTORS	1	0	1	0	0	0	0	0	0			
P1095 P3-62 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES MAGNETS	0	0	0	0	0	0	0	0	0			
P1096 P3-63 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES ATTENUATORS	1	0	1	0	0	0	0	0	0			
P1097 P3-64 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER FERRITE CIRCULATORS	0	0	0	0	0	0	0	0	0			
P1098 P3-65 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER SIGNAL CAVITIES	0	0	0	0	0	0	0	0	0			
P1099 P3-66 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER IDLER CAVITIES	0	0	0	0	0	0	0	0	0			
P1100 P3-67 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER VARACTOR DIODES	0	0	0	0	0	0	0	0	0			
P1101 P3-68 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER FERRITE ISOLATORS	0	0	0	0	0	0	0	0	0			
P1102 P3-69 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER REVERSE-BIAS BATTERIES	0	0	0	0	0	0	0	0	0			
P1103 P3-70 DO YOU PERFORM TASKS ON ANODES	0	0	0	0	0	0	0	0	0			
P1104 P3-71 DO YOU PERFORM TASKS ON ANODE COOLING PINS	0	0	0	0	0	0	0	0	0			
P1105 P3-72 DO YOU PERFORM TASKS ON COUPLING LOOPS	0	0	0	0	0	0	0	0	0			
P1106 P3-73 DO YOU PERFORM TASKS ON HEATER LEADS	0	0	0	0	0	0	0	0	0			
P1107 P3-74 DO YOU PERFORM TASKS ON RESONANT CAVITIES	0	0	0	0	0	0	0	0	0			
P1108 P3-75 DO YOU PERFORM TASKS ON CATHODES	0	0	0	0	0	0	0	0	0			
P1109 P3-76 DO YOU PERFORM TASKS ON MAGNETS	0	0	0	0	0	0	0	0	0			
Q1110 Q1-01 DO YOU USE OR REFER TO STORAGE REGISTERS	0	0	1	0	0	0	0	0	0			
Q1111 Q1-02 DO YOU USE OR REFER TO SHIFT REGISTERS	0	0	1	0	0	0	0	0	0			
Q1112 Q1-03 DO YOU USE OR REFER TO LOGIC SYMBOLS OF SHIFT REGISTERS	0	0	1	0	0	0	0	0	0			
Q1113 Q1-04 DO YOU USE OR REFER TO LOGIC SYMBOLS OF STORAGE REGISTERS	0	0	1	0	0	0	0	0	0			
Q1114 Q1-05 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS	0	0	0	0	0	0	0	0	0			
Q1115 Q1-06 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF REGISTERS	1	2	1	0	0	0	0	0	0			

REGISTERS

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING

DY-75K

	SPL	SPL	SPL	SPL	SPL	SPL
	032	033	034	035	036	037
Q116 Q1-07 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP OF A SHIFT REGISTER AFTER A SPECIFIED NUMBER OF SHIFT PULSES	2	2	2	8	0	0
Q117 Q2-01 DO YOU WORK WITH DIGITAL COUNTS, REGISTERS, OR STORAGE DEVICES IN YOUR PRESENT JOB	9	7	9	8	9	0
Q118 Q2-02 DO YOU USE OR REFER TO DELAY LINES	0	0	1	0	0	7
Q119 Q2-03 DO YOU USE OR REFER TO MAGNETIC CONES	0	0	1	0	0	0
Q120 Q2-04 DO YOU USE OR REFER TO MAGNETIC DRUMS	0	0	1	0	0	0
Q121 Q2-05 DO YOU USE OR REFER TO MAGNETIC TAPES	0	0	1	0	0	0
Q122 Q2-06 DO YOU USE OR REFER TO ACCESS TIME OR SPEED OR MEMORY SYSTEMS	0	0	1	0	0	0
Q123 Q2-07 DO YOU USE OR REFER TO WORD CAPACITY OF MEMORY SYSTEMS	0	0	1	0	0	0
Q124 Q2-08 DO YOU USE OR REFER TO VOLATILITY OF MEMORY SYSTEMS	0	0	1	0	0	0
Q125 Q2-09 DO YOU USE OR REFER TO LOGIC SYMBOL OF DELAY LINES	0	0	1	0	0	0
Q126 Q2-01 IN YOUR PRESENT JOB, DO YOU WORK WITH DIGITAL-TO- ANALOG (D/A) CONVERTERS, ANALOG-TO-DIGITAL (A/D)	1	0	1	0	0	0
Q127 Q2-02 DO YOU COMPUTE OUTPUT VOLTAGES FOR ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS FOR GIVEN INPUT	0	0	0	0	0	0
Q128 Q2-03 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE COUNT IN ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A)	0	0	0	0	0	0
Q129 Q2-04 DO YOU COMPUTE ANALOG VOLTAGES FOR GIVEN BINARY COUNTS IN ELECTRONIC DIGITAL-TO-ANALOG (D/A) CONVERTERS	0	0	0	0	0	0
Q130 Q2-05 DO YOU PERFORM SAMPLE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0	0
Q131 Q2-06 DO YOU PERFORM HOLD FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0	0
Q132 Q2-07 DO YOU PERFORM COMPARE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0	0
Q133 Q2-08 DO YOU PERFORM DIGITIZE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0	0
Q134 Q2-09 DO YOU PERFORM DON'T REMEMBER WHICH FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER	0	0	0	0	0	0
Q135 Q2-10 DO YOU USE OR REFER TO SAMPLE FUNCTION OF A/D CONVERTERS	0	0	0	0	0	0
Q136 Q2-11 DO YOU USE OR REFER TO HOLD FUNCTION OF A/D CONVERTERS	0	0	0	0	0	0
Q137 Q2-12 DO YOU USE OR REFER TO COMPARE FUNCTION OF A/D CONVERTERS	0	0	0	0	0	0
Q138 Q2-13 DO YOU USE OR REFER TO DIGITAL FUNCTION OF A/D CONVERTERS	0	0	0	0	0	0
Q139 Q2-14 DO YOU PERFORM ANY TASKS ON MECHANICAL ANALOG-TO- DIGITAL (A/D) CONVERTERS	0	0	0	0	0	0

DIGITAL TO ANALOG CONVERTERS

STORAGE DEVICES

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING

DT-TSK

	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	SPL	
	032	033	034	035	036	037				
R1140 R1-01 DO YOU WORK WITH PHANTASTRON CIRCUITRY IN YOUR PRESENT JOB	0	0	0	0	0	14				PHANTASTRONS
R1141 R2-01 IN YOUR PRESENT JOB DO YOU WORK WITH SCHMITT TRIGGER CIRCUITS	1	0	1	0	0	7				
R1142 R2-02 DO YOU TRACE DATA FLOW THROUGH SCHMITT TRIGGER SCHEMATIC DIAGRAMS	0	0	0	0	0	0				
R1143 R2-03 DO YOU USE OR REFER TO SCHMITT TRIGGER LOGIC SYMBOLS	0	0	1	0	0	0				SCHMITT TRIGGERS
R1144 R3-01 IN YOUR PRESENT JOB DO YOU FABRICATE MULTICONDUCTOR CABLES	5	2	5	15	27	29				CABLE FABRICATION
R1145 R3-02 DO YOU FABRICATE COAXIAL CABLES	4	5	5	31	27	29				
S1146 S1-01 IN YOUR PRESENT JOB DO YOU PERFORM ANY TASKS ON VISUAL READOUT SYSTEMS	23	10	20	31	34	7				
S1147 S1-02 DO YOU PERFORM ANY TASKS ON MIXIE LIGHTS OR MIXIE LIGHT DECODER SYSTEMS	3	0	3	0	19	7				INPUT/OUTPUT DEVICES
S1148 S1-03 DO YOU ANALYZE MIXIE LIGHT DECODER SYSTEMS USING BOOLEAN ALGEBRA	0	0	0	0	0	0				
S1149 S2-01 DO YOU WORK WITH PHOTO TUBES IN YOUR PRESENT JOB	2	7	3	0	0	7				PHOTO SENSITIVE DEVICES
S1150 S3-01 IN YOUR PRESENT JOB DO YOU WORK WITH CHOPPER CIRCUITS	1	0	1	0	9	0				
S1151 S3-02 DO YOU MEASURE EXCITATION FREQUENCIES	0	0	0	0	9	0				
S1152 S3-03 DO YOU MEASURE VOLTAGE-CURRENT PHASE RELATIONSHIPS	0	0	0	0	9	0				
S1153 S3-04 DO YOU USE OR REFER TO EXCITATION FREQUENCIES	0	0	0	0	9	0				
S1154 S3-05 DO YOU USE OR REFER TO VOLTAGE-CURRENT PHASE RELATIONSHIPS	0	0	0	0	9	0				SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS)
S1155 S3-06 DO YOU USE SERVOS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	1	0	1	0	9	0				
S1156 S3-07 DO YOU USE DETECTORS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	1	0	1	0	9	0				
S1157 S3-08 DO YOU USE ERROR SIGNAL DEVICES IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	1	0	1	0	9	0				
S1158 S3-09 DO YOU USE COMPARISON CIRCUITS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	1	0	1	0	9	0				
T1159 T1-01 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH INFRARED SYSTEMS	40	47	42	31	45	43				INFRARED
T1160 T1-02 DO YOU INSPECT INFRARED SYSTEMS	35	30	34	31	45	34				
T1161 T1-03 DO YOU CLEAN INFRARED SYSTEMS	27	27	27	23	27	21				
T1162 T1-04 DO YOU ADJUST OR CALIBRATE INFRARED SYSTEMS	30	27	29	15	18	21				
T1163 T1-05 DO YOU OPERATE INFRARED SYSTEMS	34	35	34	23	18	43				
T1164 T1-06 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF INFRARED SYSTEMS	14	20	15	23	18	34				
T1165 T1-07 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF INFRARED SYSTEMS	23	22	22	15	27	21				
T1166 T1-08 DO YOU TROUBLESHOOT DOWN TO INFRARED SYSTEM COMPONENT PARTS	7	15	9	0	9	21				
T1167 T1-09 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF INFRARED SYSTEMS	25	17	23	15	18	29				
T1168 T1-10 DO YOU REMOVE OR REPLACE INFRARED SYSTEM COMPONENT PARTS	11	17	12	0	9	14				

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

SPL SPL SPL SPL SPL SPL
032 033 034 035 036 037

11169	11-11	DO YOU USE OR REFER TO FAR REGION	5	5	5	0	0	0	0
11170	11-12	DO YOU USE OR REFER TO INTERMEDIATE REGION	4	5	5	0	0	0	7
11171	11-13	DO YOU USE OR REFER TO NEAR REGION	5	5	5	0	0	0	0
11172	11-14	DO YOU USE OR REFER TO MICRON	6	10	7	8	0	0	7
11173	11-15	DO YOU USE OR REFER TO GRAY BODIES	7	7	7	8	0	0	0
11174	11-16	DO YOU USE OR REFER TO BLACK BODIES	7	10	8	8	18	7	7
11175	11-17	DO YOU USE OR REFER TO ABSORPTION	8	10	9	0	9	0	0
11176	11-18	DO YOU USE OR REFER TO SCATTERING	8	10	9	0	0	0	0
11177	11-19	DO YOU USE OR REFER TO ABSOLUTE ZERO	4	7	5	0	9	0	0
11178	11-20	DO YOU PERFORM TASKS ON BLITZ	0	0	0	0	0	0	0
11179	11-21	DO YOU PERFORM TASKS ON TARGET BUTTONS	0	0	0	0	0	0	0
11180	11-22	DO YOU PERFORM TASKS ON EJECTOR LENSES	0	0	0	0	0	0	0
11181	11-23	DO YOU PERFORM TASKS ON OCULAR LENSES	1	0	1	0	0	0	0
11182	11-24	DO YOU PERFORM TASKS ON CORRECTION LENSES	2	0	1	0	0	0	0
11183	11-25	DO YOU PERFORM TASKS ON FILTERS	2	0	1	0	9	0	0
11184	11-26	DO YOU PERFORM TASKS ON SPHERICAL MIRRORS	1	0	1	0	9	0	0
11185	11-27	DO YOU PERFORM TASKS ON PLANE MIRRORS	0	0	0	0	0	0	0
11186	12-01	DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH LASERS	6	2	5	0	0	0	7
11187	12-02	DO YOU INSPECT LASER SYSTEMS	4	2	5	0	0	0	7
11188	12-03	DO YOU CLEAN LASER SYSTEMS	3	0	2	0	0	0	7
11189	12-04	DO YOU OPERATE LASER SYSTEMS	4	2	4	0	0	0	7
11190	12-05	DO YOU OPERATE LASER SYSTEMS	4	2	4	0	0	0	7
11191	12-06	DO YOU TROUBLESHOOT WIRE CONNECTIONS OF LASER SYSTEMS	3	0	2	0	0	0	7
11192	12-07	DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF LASER SYSTEMS	3	0	2	0	0	0	7
11193	12-08	DO YOU TROUBLESHOOT TO COMPONENT PARTS OF LASER SYSTEMS	3	0	2	0	0	0	7
11194	12-09	DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF LASER SYSTEMS	3	0	2	0	0	0	7
11195	12-10	DO YOU REMOVE OR REPLACE COMPONENT PARTS OF LASER SYSTEMS	1	0	1	0	0	0	0
11196	12-11	DO YOU USE OR REFER TO ANGSTROMS (A)	1	0	1	0	0	0	0
11197	12-12	DO YOU USE OR REFER TO ELECTRON ENERGY LEVELS	0	0	0	0	0	0	0
11198	12-13	DO YOU USE OR REFER TO GROUND STATE	0	0	0	0	0	0	0
11199	12-14	DO YOU USE OR REFER TO EXCITED STATE	0	0	0	0	0	0	0
11200	12-15	DO YOU USE OR REFER TO PACKET OF RADIATION	0	0	0	0	0	0	0
11201	12-16	DO YOU USE OR REFER TO PHOTONS	0	0	0	0	0	0	0
11202	12-17	DO YOU USE OR REFER TO SPONTANEOUS EMISSION	0	0	0	0	0	0	0
11203	12-18	DO YOU USE OR REFER TO STIMULATED EMISSION	0	0	0	0	0	0	0
11204	12-19	DO YOU USE OR REFER TO COHERENCE OR INCOHERENCE	0	0	0	0	0	0	0
11205	12-20	DO YOU USE OR REFER TO INVERSION LEVEL	0	0	0	0	0	0	0
11206	12-21	DO YOU USE OR REFER TO MONOCHROMATIC	1	0	1	0	0	0	0
11207	12-22	DO YOU WORK WITH ACTIVE MATERIALS	1	0	1	0	0	0	0
11208	12-23	DO YOU WORK WITH PUMPING SOURCES	1	0	1	0	0	0	0
11209	12-24	DO YOU WORK WITH FULL SILVERED (100% REFLECTIVE) MIRRORS	1	0	1	0	0	0	0

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY

PERCENT MEMBERS PERFORMING

BY-TSK

SPL SPL SPL SPL SPL
032 033 034 035 036 037

T1210 T2-26 DO YOU WORK WITH HALF SILVERED 192B REFLECTIVE)	1	0	1	0	0	0
MIRRORS						
T1211 T2-26 DO YOU WORK WITH MELICAL PLASHTUBES	1	0	1	0	0	0
T1212 T2-27 DO YOU WORK WITH RUBY	0	0	0	0	0	0
T1213 T2-28 DO YOU WORK WITH HELIUM-NEON	1	0	1	0	0	0
T1214 T2-29 DO YOU WORK WITH HELIUM-XENON	0	0	0	0	0	0
T1215 T2-30 DO YOU WORK WITH XENON	0	0	0	0	0	0
T1216 T2-31 DO YOU WORK WITH CESIUM-HELIUM	0	0	0	0	0	0
T1217 T2-32 DO YOU WORK WITH ARGON	1	2	1	0	0	0
T1218 T2-33 DO YOU WORK WITH NEODYMIUM IN GLASS	0	0	0	0	0	0
T1219 T2-34 DO YOU WORK WITH GALLIUM ARSENIDE	0	0	0	0	0	0
T1220 T3-01 IN YOUR PRESENT JOB DO YOU WORK WITH DISPLAY TUBES, SUCH AS DIRECT VIEW STORAGE (DVST) OR MULTIPLE MODE	1	0	1	0	0	0
T1221 T3-02 DO YOU INSPECT DVST OR MNST	1	0	1	0	0	0
T1222 T3-03 DO YOU CLEAN DVST OR MNST	1	2	1	2	0	0
T1223 T3-04 DO YOU ADJUST OR CALIBRATE DVST OR MNST	1	0	1	0	0	0
T1224 T3-05 DO YOU OPERATE SYSTEMS THAT CONTAIN DVST OR MNST	1	0	1	0	0	0
T1225 T3-06 DO YOU TROUBLESHOOT DVST OR MNST	1	0	1	0	0	0
CIRCUITS						
T1226 T3-07 DO YOU REMOVE OR REPLACE DVST OR MNST TUBES FROM MAJOR ASSEMBLIES OR UNITS	1	0	1	0	0	0
T1227 T3-08 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME THE VARIOUS ELEMENTS OF DVST	0	0	0	0	0	0
T1228 T3-09 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME THE VARIOUS ELEMENTS OF MNST	0	0	0	0	0	0
T1229 T3-10 DO YOU PERFORM TASKS ON FLOOD GUNS	0	0	0	0	0	0
T1230 T3-11 DO YOU PERFORM TASKS ON WRITE GUNS	0	0	0	0	0	0
T1231 T3-12 DO YOU PERFORM TASKS ON ATTACK GUNS	0	0	0	0	0	0
T1232 T3-13 DO YOU PERFORM TASKS ON ERASE GUNS	0	0	0	0	0	0
T1233 T3-14 DO YOU PERFORM TASKS ON STORAGE GRIDS	1	0	1	0	0	0
T1234 U1-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY PROGRAMMING TASKS	0	0	0	0	0	0
PROGRAMMING						
U1235 U1-02 DO YOU USE OR REFER TO DECIMAL SYSTEMS	0	0	0	0	0	0
U1236 U1-03 DO YOU USE OR REFER TO PROGRAMS	0	0	0	0	0	0
U1237 U1-04 DO YOU USE OR REFER TO HEXIDECIMAL SYSTEMS	0	0	0	0	0	0
U1238 U1-05 DO YOU USE OR REFER TO 8-4-2-1 SYSTEMS	0	0	0	0	0	0
U1239 U1-06 DO YOU USE OR REFER TO FOUR SYSTEMS	0	0	0	0	0	0
U1240 U1-07 DO YOU USE OR REFER TO BINARY SYSTEMS	0	0	0	0	0	0
U1241 U1-08 DO YOU USE OR REFER TO TIME-SHARING	0	0	0	0	0	0
U1242 U1-09 DO YOU USE OR REFER TO DATA WORDS	0	0	0	0	0	0
U1243 U1-10 DO YOU USE OR REFER TO ADDRESS WORDS	0	0	0	0	0	0
U1244 U1-11 DO YOU USE OR REFER TO ADDRESS/SUBADDRESS	0	0	0	0	0	0
U1245 U1-12 DO YOU USE OR REFER TO STEERING/INFORMATION	0	0	0	0	0	0
U1246 U1-13 DO YOU USE OR REFER TO INFORMATION WORDS	0	0	0	0	0	0
U1247 U1-14 DO YOU PERFORM TASKS ON SINGLE LEVEL PROGRAMMING	0	0	0	0	0	0
U1248 U1-15 DO YOU PERFORM TASKS ON MULTI-LEVEL PROGRAMMING	0	0	0	0	0	0

DISPLAY TUBES

PERCENT MEMBERS PERFORMING TASKS BY AFMS GROUPS

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TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK										SPL SPL SPL SPL SPL SPL SPL SPL SPL						
												032	033	034	035	036	037	
U1249	U1-16	DO YOU PERFORM TASKS ON INPUT DEVICES	0	0	0	0	0	0	0	0	0							
U1250	U1-17	DO YOU PERFORM TASKS ON STORAGE DEVICES	0	0	0	0	0	0	0	0	0							
U1251	U1-18	DO YOU PERFORM TASKS ON ARITHMETIC SECTIONS	0	0	0	0	0	0	0	0	0							
U1252	U1-19	DO YOU PERFORM TASKS ON CONTROL SECTIONS	0	0	0	0	0	0	0	0	0							
U1253	U1-20	DO YOU PERFORM TASKS ON OUTPUT DEVICES	0	0	0	0	0	0	0	0	0							
U1254	U1-21	DO YOU PERFORM TASKS ON POWER SUPPLIES	0	0	0	0	0	0	0	0	0							
U1255	U2-01	DO YOU USE DECIBELS TO EXPRESS AMPLIFICATION AND ATTENUATION	2	0	1	0	0	18	21									
U1256	U2-02	DO YOU USE LOGARITHMS TO COMPUTE OUTPUT POWER IN DECIBELS	0	0	0	0	0	0	0	0	0							
U1257	U2-03	DO YOU USE LOGARITHMS TO COMPUTE ATTENUATION IN DECIBELS	0	0	0	0	0	0	0	0	0							
U1258	U2-04	DUMMY TASK TO IDENTIFY INCUMBENTS WHO PERFORMED NO TASKS	10	2	0	0	0	0	0	0	7							

DB AND POWER RATIOS

UNITED STATES AIR FORCE
JOB INVENTORYMISSILE SYSTEMS MAINTENANCE (EP1)
AFSCS 31631L, 31651L, 31671L, 3179D

A MATHEMATICS, DIRECT CURRENT, VOLTAGE, AND RESISTANCE		WITH AS CARBON, FIXED WIRE, SLIDE TAP, RHEOSTAT, OR POTENTIOMETER.	
A 1	A1-01 DO YOU USE YOUR PRESENT JOB, DO YOU USE INSTRUMENTS, SUCH AS METERS OR OSCILLOSCOPES, IN WHICH IT IS NECESSARY TO AMPLIFY OR ATTENUATE VOLTAGE, RESISTANCE, ETC., BY POWERS OF 10.	A 33	A3-10 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE OHMIC VALUE OF RESISTANCE.
A 2	A1-02 DO YOU USE PUBLICATIONS, SUCH AS A TECHNICAL ORDERS OR MAINTENANCE MANUALS, IN WHICH IT IS NECESSARY FOR YOU TO MULTIPLY OR DIVIDE BY A POWER OF 10 BEFORE YOU CAN APPLY THE INFORMATION FROM THE PUBLICATION IN A USEFUL WAY ON THE JOB.	A 34	A3-11 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE TOLERANCE.
A 3	A1-03 DO YOU REARRANGE AND SOLVE FORMULAS OR EQUATIONS.	A 35	A3-12 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE FAILURE RATE.
A 4	A1-04 DO YOU CALCULATE THE SQUARE ROOT OF A QUANTITY.	A 36	A3-13 DO YOU MAKE DECISIONS IN WHICH YOU MUST DETERMINE HOW TWO OR MORE BATTERIES MUST BE CONNECTED TOGETHER TO ACHIEVE A SPECIFIC VOLTAGE.
A 5	A1-05 DO YOU SOLVE FOR UNKNOWN QUANTITIES.	A 37	A3-14 DO YOU USE OR REFER TO THE SCHEMATIC SYMBOLS WHICH REPRESENT BATTERIES, FUSES, CONDUCTORS, LAMPS, OR SWITCHES
A 6	A1-06 DO YOU CONVERT NUMBERS TO LOGARITHMS.	A 38	A3-15 DO YOU CALCULATE TOTAL RESISTANCE FOR SERIES RESISTIVE CIRCUITS.
A 7	A1-07 DO YOU USE LOGARITHM TABLES IN ANY TYPE OF CALCULATIONS.	A 39	A3-16 DO YOU CALCULATE TOTAL CURRENT FOR SERIES RESISTIVE CIRCUITS.
A 8	A1-08 DO YOU SOLVE QUADRATIC EQUATIONS.	A 40	A3-17 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR SERIES RESISTIVE CIRCUITS.
A 9	A1-09 DO YOU USE THE NATURAL SYSTEM OF LOGARITHMS.	A 41	A3-18 DO YOU CALCULATE POWER DISSIPATION FOR SERIES RESISTIVE CIRCUITS.
A 10	A1-10 DO YOU PERFORM CALCULATIONS ON VECTOR QUANTITIES.	A 42	A3-19 DO YOU CALCULATE TOTAL RESISTANCE FOR SERIES PARALLEL RESISTIVE CIRCUITS.
A 11	A1-11 DO YOU WORK WITH TRIGONOMETRIC FUNCTIONS SUCH AS SINE, COSINE, OR TANGENT.	A 43	A3-20 DO YOU CALCULATE TOTAL CURRENT FOR SERIES PARALLEL RESISTIVE CIRCUITS.
A 12	A1-12 DO YOU DETERMINE AREAS OF PLANE FIGURES.	A 44	A3-21 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR SERIES PARALLEL RESISTIVE CIRCUITS.
A 13	A1-13 DO YOU SOLVE OR USE SIMULTANEOUS EQUATIONS.	A 45	A3-22 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENTS FOR SERIES PARALLEL RESISTIVE CIRCUITS.
A 14	A1-14 DO YOU SOLVE OR USE PROPORTIONS.	A 46	A3-23 DO YOU CALCULATE POWER DISSIPATION FOR SERIES PARALLEL RESISTIVE CIRCUITS.
A 15	A2-01 DO YOU USE THE TERM VOLTAGE OR VOLT (V).	A 47	A3-24 DO YOU CALCULATE TOTAL RESISTANCE FOR PARALLEL RESISTIVE CIRCUITS.
A 16	A2-02 DO YOU USE THE TERM ELECTROMOTIVE FORCE (EMF).	A 48	A3-25 DO YOU CALCULATE TOTAL CURRENT FOR PARALLEL RESISTIVE CIRCUITS.
A 17	A2-03 DO YOU USE THE TERM OHM.	A 49	A3-26 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR PARALLEL RESISTIVE CIRCUITS.
A 18	A2-04 DO YOU USE THE TERM ION.	A 50	A3-27 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENTS FOR PARALLEL RESISTIVE CIRCUITS.
A 19	A2-05 DO YOU USE THE TERM DYNE.	A 51	A3-28 DO YOU CALCULATE POWER DISSIPATION FOR PARALLEL RESISTIVE CIRCUITS.
A 20	A2-06 DO YOU USE THE TERM AMPERE.		
A 21	A2-07 DO YOU USE THE TERM NEUTRON.		
A 22	A2-08 DO YOU USE THE TERM COULOMB.		
A 23	A2-09 DO YOU USE THE TERM PROTON.		
A 24	A3-01 DO YOU WORK WITH RESISTORS IN YOUR PRESENT JOB.		
A 25	A3-02 DO YOU INSPECT RESISTORS.		
A 26	A3-03 DO YOU CLEAN RESISTORS.		
A 27	A3-04 DO YOU ADJUST RESISTORS.		
A 28	A3-05 DO YOU CHECK OHMIC VALUE OR RESISTORS.		
A 29	A3-06 DO YOU REMOVE OR REPLACE RESISTORS.		
A 30	A3-07 DO YOU USE OR REFER TO TEMPERATURE COEFFICIENTS FOR RESISTORS ON ANY TASKS YOU PERFORM.		
A 31	A3-08 DO YOU USE OR REFER TO RESISTOR SYMBOLS SUCH AS FIXED RESISTOR SYMBOLS OR TAPPED RESISTOR SYMBOLS.		
A 32	A3-09 DO YOU IDENTIFY OR CLASSIFY THE RESISTORS YOU WORK		
		0	MULTIMETER USES, ALTERNATING CURRENT, INDUCTORS, AND INDUCTIVE RESISTANCE.
		B 52	B1-01 DO YOU MEASURE RESISTANCE.

0 53 01-02 DO YOU REPAIR OHMMETERS.
0 54 01-03 DO YOU MEASURE VOLTAGE.
0 55 01-04 DO YOU REPAIR VOLTMETERS.
0 56 01-05 DO YOU REPAIR AMPMETERS.
0 57 01-06 DO YOU MEASURE CURRENT.
0 58 01-07 DO YOU USE MULTIMETERS.
0 59 01-08 DO YOU DIRECTLY USE A QUANTITY OF CHARGE CALLED A COULOMB.
0 60 01-09 DO YOU READ SCHEMATICS.
0 61 02-01 DO YOU USE OR REFER TO THE TERM EFFECTIVE VOLTAGE (RMS).
0 62 02-02 DO YOU USE OR REFER TO THE TERM PEAK TO PEAK VOLTAGE.
0 63 02-03 DO YOU USE OR REFER TO THE TERM AVERAGE VOLTAGE (DC).
0 64 02-04 DO YOU USE OR REFER TO THE TERM WAVE LENGTH.
0 65 02-05 DO YOU USE OR REFER TO THE TERM FREQUENCY.
0 66 02-06 DO YOU USE OR REFER TO THE TERM INSTANTANEOUS VALUE.
0 67 03-01 DO YOU WORK WITH INDUCTORS OR CIRCUITS CONTAINING INDUCTORS, CHOKES, OR CHOKE COILS IN YOUR PRESENT JOB.
0 68 03-02 DO YOU INSPECT INDUCTORS.
0 69 03-03 DO YOU CLEAN INDUCTORS.
0 70 03-04 DO YOU ADJUST INDUCTORS.
0 71 03-05 DO YOU REMOVE OR REPLACE INDUCTORS.
0 72 03-06 DO YOU USE OR REFER TO INDUCTANCE.
0 73 03-07 DO YOU USE OR REFER TO HENRIES.
0 74 03-08 DO YOU USE OR REFER TO INDUCTIVE REACTANCE.
0 75 03-09 DO YOU USE OR REFER TO COPPER LOSS IN INDUCTORS.
0 76 03-10 DO YOU USE OR REFER TO HYSTERESIS LOSS IN INDUCTORS.
0 77 03-11 DO YOU USE OR REFER TO EDGY CURRENT LOSS IN INDUCTORS.
0 78 03-12 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTANCE IS PROPORTIONAL TO THE SQUARE OF THE NUMBER OF TURNS OF THE COIL.
0 79 02-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE CROSS SECTIONAL AREA OF THE CORE.
0 80 02-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS INVERSELY PROPORTIONAL TO ITS LENGTH.
0 91 02-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE PERMEABILITY OF THE CORE MATERIAL.
0 92 02-16 DO YOU CALCULATE INDUCTANCE FOR PARTICULAR INDUCTORS USING FORMULAS.
0 93 03-17 DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTANT IN SERIES.
0 94 03-18 DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTORS IN PARALLEL.
0 95 03-19 DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTORS IN SERIES-PARALLEL CIRCUITS.
0 96 03-20 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LAGS VOLTAGE IN AC INDUCTOR CIRCUITS.
0 97 03-21 DO YOU CALCULATE INDUCTIVE REACTANCE.
0 98 03-22 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTIVE REACTANCE IS DIRECTLY PROPORTIONAL TO FREQUENCY.
0 99 03-23 DO YOU WORK WITH POWER INDUCTORS.
0 90 03-24 DO YOU WORK WITH AUDIO FREQUENCY INDUCTORS.
0 91 03-25 DO YOU WORK WITH RADIO FREQUENCY INDUCTORS.
C CAPACITORS, CAPACITIVE REACTANCE, TRANSFORMERS, AND MAGNETISM
C 92 01-01 DO YOU WORK WITH CAPACITORS OR CIRCUITS CONTAINING CAPACITORS IN YOUR PRESENT JOB.
C 93 01-02 DO YOU INSPECT CAPACITORS.
C 94 01-03 DO YOU CLEAN CAPACITORS.
C 95 01-04 DO YOU ADJUST CAPACITORS.
C 96 01-05 DO YOU TEST CAPACITORS.
C 97 01-06 DO YOU DISCHARGE CAPACITORS.
C 98 01-07 DO YOU REMOVE OR REPLACE CAPACITORS.
C 99 01-08 DO YOU USE OR REFER TO DISTRIBUTED CAPACITANCE.
C 00 01-09 DO YOU USE OR REFER TO ORBITAL STRESS OF ELECTRONS IN A DIELECTRIC.
C 01 01-10 DO YOU USE OR REFER TO P-FADS, MICROFARADS, OR PICOFARADS.
C 02 01-11 DO YOU USE OR REFER TO CAPACITANCE.
C 03 01-12 DO YOU USE OR REFER TO DIELECTRIC CONSTANT
C 04 01-13 DO YOU USE OR REFER TO WORKING VOLTAGE RATING OF CAPACITORS
C 05 01-14 DO YOU USE OR REFER TO CAPACITIVE REACTANCE
C 06 01-15 DO YOU USE OR REFER TO CAPACITOR COLOR CODES
C 07 01-16 DO YOU WORK WITH CAPACITORS IN DC CIRCUITS
C 08 01-17 DO YOU WORK WITH CAPACITORS IN AC CIRCUITS
C 09 01-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC
C 10 01-19 DO YOU WORK WITH CAPACITORS IN DON'T REMEMBER WHICH CIRCUITS
C 11 01-20 DO YOU CALCULATE CAPACITANCE FOR PARTICULAR CAPACITORS USING FORMULAS
C 12 01-21 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS DIRECTLY PROPORTIONAL TO THE DIELECTRIC CONSTANT
C 13 01-22 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS INVERSELY PROPORTIONAL TO THE DIELECTRIC THICKNESS
C 14 01-23 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN SERIES
C 15 01-24 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN PARALLEL
C 16 01-25 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN SERIES-PARALLEL CIRCUITS
C 17 01-26 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT DOES NOT FLOW THROUGH CAPACITORS, IT ONLY APPEARS TO DO SO
C 18 01-27 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LEADS VOLTAGE IN AC CAPACITOR CIRCUITS
C 19 01-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT

CAPACITIVE REACTANCE IS INVERSELY PROPORTIONAL TO FREQUENCY	
C120 C1-29 DO YOU CALCULATE CAPACITIVE REACTANCE	C153 C2-26 DO YOU REFER TO MULTIPLE TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS
C121 C1-30 DO YOU WORK WITH ROTOR-STATOR (VARIABLE) CAPACITORS	C154 C2-27 DO YOU REFER TO CENTER TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS
C122 C1-31 DO YOU WORK WITH COMPRESSION (TRIMMER) CAPACITORS	C155 C2-28 DO YOU REFER TO AIR CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS
C123 C1-32 DO YOU WORK WITH ELECTROLYTIC (FIXED) CAPACITORS	C156 C2-29 DO YOU REFER TO IRON CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS
C124 C1-33 DO YOU WORK WITH PAPER (FIXED) CAPACITORS	C157 C2-30 DO YOU REFER TO COMBINATIONS OF THE ABOVE SCHEMATIC SYMBOLS FOR TRANSFORMERS
C125 C1-34 DO YOU WORK WITH MICA (FIXED) CAPACITORS	C158 C2-31 DO YOU DETERMINE PHASE RELATIONSHIPS BETWEEN SECONDARY AND PRIMARY VOLTAGES OF TRANSFORMERS USING SCHEMATIC SYMBOLS
C126 C1-35 DO YOU WORK WITH CERAMIC (FIXED) CAPACITORS	C159 C2-32 DO YOU DETERMINE OR REFER TO THE TYPE OF CORE IN TRANSFORMERS YOU WORK WITH
C127 C1-36 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE OF CAPACITORS	C160 C2-33 DO YOU REFER TO OR USE THE GENERAL RULE THAT THE TURNS RATIO OF A TRANSFORMER IS EQUAL TO THE VOLTAGE RATIO
C128 C2-01 DO YOU WORK WITH TRANSFORMERS IN YOUR PRESENT JOB	C161 C2-34 DO YOU USE OR REFER TO STEP-UP OR STEP-DOWN RATIOS FOR TRANSFORMERS
C129 C2-02 DO YOU INSPECT TRANSFORMERS	C162 C2-35 DO YOU CALCULATE VOLTAGE RATIOS FOR TRANSFORMERS USING TURNS RATIOS
C130 C2-03 DO YOU CLEAN TRANSFORMERS	C163 C2-36 DO YOU CALCULATE CURRENT RATIOS FOR TRANSFORMERS USING TURNS RATIOS
C131 C2-04 DO YOU ADJUST TRANSFORMERS	C164 C2-37 DOES YOUR JOB INVOLVE ANY TASKS DEALING WITH THREE PHASE TRANSFORMERS
C132 C2-05 DO YOU TROUBLESHOOT TRANSFORMERS	C165 C2-38 DO YOU INSPECT THREE PHASE TRANSFORMERS
C133 C2-06 DO YOU REMOVE OR REPLACE COMPLETE TRANSFORMERS	C166 C2-39 DO YOU CLEAN OR LUBRICATE THREE PHASE TRANSFORMERS
C134 C2-07 DO YOU REMOVE OR REPLACE TRANSFORMER PARTS, SUCH AS THE PRIMARY WINDING	C167 C2-40 DO YOU ADJUST THREE PHASE TRANSFORMERS
C135 C2-08 DO YOU MAKE A DISTINCTION BETWEEN MUTUAL INDUCTION AND MUTUAL INDUCTANCE (M)	C168 C2-41 DO YOU TROUBLESHOOT THREE PHASE TRANSFORMERS
C136 C2-09 DO YOU USE THE SYMBOL FOR MUTUAL INDUCTANCE, M	C169 C2-42 DO YOU REMOVE OR REPLACE COMPLETE THREE PHASE TRANSFORMERS
C137 C2-10 DO YOU REFER TO OR USE THE COEFFICIENT OF COUPLING WHEN WORKING WITH TRANSFORMERS	C170 C2-43 DO YOU REMOVE OR REPLACE THREE PHASE TRANSFORMER PARTS SUCH AS WINDINGS
C138 C2-11 DO YOU CALCULATE TURNS RATIOS FOR TRANSFORMERS USING CURRENT OR VOLTAGE RATIOS	C171 C3-01 DO YOU USE OR REFER TO PERMANENT MAGNETS
C139 C2-12 DO YOU REFER TO REFLECTED IMPEDANCE WHEN WORKING WITH TRANSFORMERS	C172 C3-02 DO YOU USE OR REFER TO TEMPORARY MAGNETS
C140 C2-13 DO YOU CALCULATE IMPEDANCE INTERACTIONS FOR TRANSFORMERS	C173 C3-03 DO YOU USE OR REFER TO RETENTIVITY OF MAGNETIC MATERIALS
C141 C2-14 DO YOU WORK WITH AUTOTRANSFORMERS	C174 C3-04 DO YOU USE OR REFER TO RELUCTANCE OF MAGNETIC MATERIALS
C142 C2-15 DO YOU WORK WITH POWER TRANSFORMERS	C175 C3-05 DO YOU USE OR REFER TO PERMEABILITY OF MAGNETIC MATERIALS
C143 C2-16 DO YOU WORK WITH AUDIO TRANSFORMERS	C176 C3-06 DO YOU USE OR REFER TO RESIDUAL MAGNETISM
C144 C2-17 DO YOU WORK WITH RADIO FREQUENCY TRANSFORMERS	C177 C3-07 DO YOU USE OR REFER TO MAGNETIC LINES OF FORCE OR FLUX
C145 C2-18 DO YOU WORK WITH DON'T REMEMBER WHAT TYPE OF TRANSFORMERS	C178 C3-08 DO YOU USE OR REFER TO WEBER'S THEORY OF MAGNETISM
C146 C2-19 DO YOU CHECK TRANSFORMERS FOR OPEN WINDINGS BY MEASURING RESISTANCE	C179 C3-09 DO YOU USE OR REFER TO DOMAIN THEORY OF MAGNETISM
C147 C2-20 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING RESISTANCE	C180 C3-10 DO YOU USE OR REFER TO MAGNETIC INDUCTION
C148 C2-21 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING OUTPUT VOLTAGES	C181 C3-11 DO YOU USE OR REFER TO FLUX DENSITY
C149 C2-22 DO YOU MEASURE RESISTANCE OF TRANSFORMER WINDINGS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN TURNS RATIO	C182 C3-12 DO YOU USE OR REFER TO THE GENERAL RULE THAT FOR MAGNETIC POLES, LIKE POLES REPEL AND UNLIKE POLES ATTRACT
C150 C2-23 DO YOU MEASURE OUTPUT VOLTAGE OF TRANSFORMERS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN TURNS RATIO	C183 C3-13 DO YOU USE THE LEFT HAND THUMB RULE TO FIND THE DIRECTION OF MAGNETIC FIELDS ABOUT STRAIGHT WIRES
C151 C2-24 DO YOU REFER TO BASIC TRANSFORMER SCHEMATIC SYMBOLS FOR TRANSFORMERS	
C152 C2-25 DO YOU REFER TO MULTIPLE SECONDARY-WINDINGS SCHEMATIC SYMBOLS FOR TRANSFORMERS	

C189 C3-14 DO YOU USE THE LEFT HAND THUMB RULE TO FIND THE NORTH POLE OF A CURRENT CARRYING COIL	D208 D1-24 DO YOU CALCULATE PHASE ANGLES BETWEEN IMPEDANCE AND RESISTANCE IN CAPACITIVE CIRCUITS
D RCL CIRCUITS, SERIES AND PARALLEL RESONANCE (TIME CONSTANTS), AND FILTERS	D209 D1-25 DO YOU CALCULATE TOTAL IMPEDANCE FOR SERIES RCL CIRCUITS
D165 D1-01 DO YOU WORK WITH RCL, LR, RCL CIRCUITS IN YOUR PRESENT JOB	D210 D1-26 DO YOU CALCULATE IMPEDANCE ANGLES FOR SERIES RCL CIRCUITS
D186 D1-02 DO YOU USE OR REFER TO VECTORS WHEN WORKING WITH RCL CIRCUITS	D211 D1-27 DO YOU CALCULATE APPARENT POWER (PA) FOR SERIES RCL CIRCUITS
D187 D1-03 DO YOU USE OR REFER TO PYTHAGOREAN THEOREM WHEN WORKING WITH RCL CIRCUITS	D212 D1-28 DO YOU CALCULATE TRUE POWER (PT) FOR SERIES RCL CIRCUITS
D188 D1-04 DO YOU USE OR REFER TO SINE WHEN WORKING WITH RCL CIRCUITS	D213 D1-29 DO YOU CALCULATE POWER FACTORS (PF) FOR SERIES RCL CIRCUITS
D189 D1-05 DO YOU USE OR REFER TO COSINE WHEN WORKING WITH RCL CIRCUITS	D214 D1-30 DO YOU CALCULATE TOTAL CURRENT FOR PARALLEL RCL CIRCUITS
D190 D1-06 DO YOU USE OR REFER TO TANGENT WHEN WORKING WITH RCL CIRCUITS	D215 D1-31 DO YOU CALCULATE IMPEDANCE ANGLES FOR PARALLEL RCL CIRCUITS
D191 D1-07 DO YOU USE OR REFER TO WATTS WHEN WORKING WITH RCL CIRCUITS	D216 D1-32 DO YOU CALCULATE TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS USING THE ASSUMED VOLTAGE METHOD
D192 D1-08 DO YOU USE OR REFER TO TRUE POWER (PT) WHEN WORKING WITH RCL CIRCUITS	D217 D1-33 DO YOU CALCULATE TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS USING OHM'S LAW
D193 D1-09 DO YOU USE OR REFER TO MAXIMUM POWER (PM) WHEN WORKING WITH RCL CIRCUITS	D218 D1-34 DO YOU CHECK CAPACITORS USING OHMMETERS
D194 D1-10 DO YOU USE OR REFER TO AVERAGE POWER (PAVE) WHEN WORKING WITH RCL CIRCUITS	D219 D1-35 DO YOU CHECK CAPACITORS USING SUBSTITUTION
D195 D1-11 DO YOU USE OR REFER TO APPARENT POWER (PA) WHEN WORKING WITH RCL CIRCUITS	D220 D1-36 DO YOU CHECK INDUCTORS USING OHMMETERS
D196 D1-12 DO YOU USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH RCL CIRCUITS	D221 D1-37 DO YOU CHECK INDUCTORS USING SUBSTITUTION
D197 D1-13 DO YOU USE OR REFER TO RESONANT CIRCUITS WHEN WORKING WITH RCL CIRCUITS	D222 D1-38 DO YOU USE OR REFER TO THE GENERAL RULE THAT $\tan \theta = \frac{Q}{1}$ AND $PA = PT$ FOR RESONANT CIRCUITS
D198 D1-14 DO YOU USE OR REFER TO BANDWIDTH WHEN WORKING WITH RCL CIRCUITS	D223 D1-39 DO YOU CALCULATE RESONANT FREQUENCIES FOR RCL CIRCUITS
D199 D1-15 DO YOU USE OR REFER TO SELECTIVITY WHEN WORKING WITH RCL CIRCUITS	D224 D1-40 DO YOU USE OR REFER TO THE GENERAL RULE THAT IMPEDANCE IS MINIMUM AND CURRENT MAXIMUM AT THE RESONANT FREQUENCY FOR SERIES RCL CIRCUITS
D200 D1-16 DO YOU USE OR REFER TO RESONANT FREQUENCY WHEN WORKING WITH RCL CIRCUITS	D225 D1-41 DO YOU USE OR REFER TO THE GENERAL RULE THAT LINE CURRENT IS MINIMUM AND IMPEDANCE MAXIMUM AT RESONANT FREQUENCY FOR PARALLEL RCL CIRCUITS
D201 D1-17 DO YOU USE OR REFER TO HALF POWER POINTS WHEN WORKING WITH RCL CIRCUITS	D226 D1-42 DO YOU USE OR REFER TO THE GENERAL RULE THAT HALF POWER POINTS ARE AT 70.7 PERCENT OF THE PEAK CURRENT VALUE
D202 D1-18 DO YOU USE OR REFER TO BANDPASS REGION WHEN WORKING WITH RCL CIRCUITS	D227 D1-43 DO YOU USE OR REFER TO THE GENERAL RULE THAT BANDWIDTH IS INVERSELY PROPORTIONAL TO Q
D203 D1-19 DO YOU USE OR REFER TO CIRCUIT Q WHEN WORKING WITH RCL CIRCUITS	D228 D1-44 DO YOU DETERMINE HOW CHANGES IN FREQUENCY, RESISTANCE, CAPACITANCE, OR INDUCTANCE WILL AFFECT CURRENT OR PHASE ANGLES FOR RCL CIRCUITS
D204 D1-20 DO YOU USE OR REFER TO TANK CIRCUITS WHEN WORKING WITH RCL CIRCUITS	D229 D2-01 IN YOUR PRESENT JOB, DO YOU WORK WITH, USE, OR REFER TO SERIES OR PARALLEL RESONANT CIRCUITS OR TIME CONSTANTS
D205 D1-21 DO YOU DETERMINE VALUES OF TRIGONOMETRIC FUNCTIONS USING FORMULAS	D230 D2-02 DO YOU WORK WITH, USE, OR REFER TO TIME CONSTANTS
D206 D1-22 DO YOU DRAW VOLTAGE, CURRENT, OR IMPEDANCE VECTOR DIAGRAMS FOR CIRCUITS	D231 D2-03 DO YOU WORK WITH, USE, OR REFER TO AVAILABLE VOLTAGE
D207 D1-23 DO YOU CALCULATE TOTAL IMPEDANCE FOR CAPACITIVE CIRCUITS	D232 D2-04 DO YOU WORK WITH, USE, OR REFER TO TRANSIENT INTERVALS
	D233 D2-05 DO YOU USE OR REFER TO THE GENERAL RULE THAT A CAPACITOR IS FULLY CHARGED (OR DISCHARGED) AFTER FIVE (5) TIME CONSTANTS (TC)
	D234 D2-06 DO YOU USE OR REFER TO UNIVERSAL TIME CONSTANT CHARTS
	D235 D2-07 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE

CIRCUIT CURRENT OR COMPONENT VOLTAGES AFTER A SPECIFIC TIME FOR RC OR LR CIRCUITS		THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH TRANSFORMER COUPLING	
D234	D2-08 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE THE TIME REQUIRED FOR CIRCUIT CURRENT OR COMPONENT VOLTAGES TO REACH SPECIFIC VALUES FOR RC OR LR CIRCUITS	E265	E1-05 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM RC COUPLING
D237	D2-09 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE COMPONENT VALUES REQUIRED FOR CIRCUIT CURRENT AND COMPONENT VOLTAGES TO REACH SPECIFIC VALUES IN SPECIFIC TIMES	E266	E1-06 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM IMPEDANCE COUPLING
		E267	E1-07 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM TRANSFORMER COUPLING
D238	D2-10 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT IN LR CIRCUITS REACHES ITS MINIMUM VALUE (OR ZERO) AFTER FIVE (5) TIME CONSTANTS	E268	E1-08 DO YOU WORK WITH DIRECTLY COUPLED CIRCUITS
		E269	E1-09 DO YOU WORK WITH CAPACITIVE-RESISTIVE COUPLED CIRCUITS
D239	D3-01 DO YOU WORK WITH CIRCUITS USED AS FILTERS IN YOUR PRESENT JOB	E270	E1-10 DO YOU WORK WITH CAPACITIVE-INDUCTIVE COUPLED CIRCUITS
D240	D3-02 DO YOU INSPECT FILTER CIRCUITS	E271	E1-11 DO YOU WORK WITH TRANSFORMER COUPLED CIRCUITS
D241	D3-03 DO YOU CLEAN FILTER CIRCUITS	E272	E1-12 DON'T REMEMBER WHICH TYPE OF COUPLING CIRCUITS
D242	D3-04 DO YOU ALIGN OR ADJUST FILTER CIRCUITS	E273	E2-01 IN YOUR PRESENT JOB, DO YOU PERFORM SOLDERING TECHNIQUES OR INSPECT OR EVALUATE SOLDERED CONNECTIONS
D243	D3-05 DO YOU TROUBLESHOOT TO THE FILTER CIRCUIT LEVEL	E274	E2-02 DO YOU SELECT TYPE OF SOLDER TO USE
D244	D3-06 DO YOU TROUBLESHOOT TO COMPONENT PARTS	E275	E2-03 DO YOU ADD FLUX TO CONNECTIONS
D245	D3-07 DO YOU REMOVE OR REPLACE THE COMPLETE FILTER CIRCUIT	E276	E2-04 DO YOU CLEAN CONNECTIONS USING SOLVENTS
D246	D3-08 DO YOU REMOVE OR REPLACE FILTER CIRCUIT COMPONENT PARTS	E277	E2-05 DO YOU STRIP INSULATION FROM WIRES
		E278	E2-06 DO YOU CONNECT OR DISCONNECT HEAT SINKS
D247	D3-09 DO YOU WORK WITH LOW PASS FILTERS	E279	E2-07 DO YOU BEND OR SHAPE WIRES OR LEADS
D248	D3-10 DO YOU WORK WITH HIGH PASS FILTERS	E280	E2-08 DO YOU CUT WIRES
D249	D3-11 DO YOU WORK WITH BANDPASS FILTERS	E281	E2-09 DO YOU FILE OR SHAPE SOLDERING IRON TIPS
D250	D3-12 DO YOU WORK WITH BAND-REJECT FILTERS	E282	E2-10 DO YOU TIN SOLDERING IRON TIPS
D251	D3-13 DON'T REMEMBER WHICH TYPE OF FILTER YOU WORK WITH	E283	E2-11 DO YOU CLEAN SOLDERING IRON TIPS
D252	D3-14 DO YOU WORK WITH L-SECTION FILTER CONFIGURATION	E284	E2-12 DO YOU CLEAN ELECTRICAL SURFACES USING ERASERS
D253	D3-15 DO YOU WORK WITH T-SECTION FILTER CONFIGURATION	E285	E2-13 DO YOU TIN OR PRE-TIN CONDUCTORS
D254	D3-16 DO YOU WORK WITH PI-SECTION FILTER CONFIGURATION	E286	E2-14 DO YOU INSPECT SOLDERED CONNECTIONS
D255	D3-17 DON'T REMEMBER WHICH TYPE FILTER CONFIGURATION	E287	E2-15 DO YOU DESOLDER CONNECTIONS BY WICKING
D256	D3-18 DO THE FILTERS YOU WORK WITH USE PARALLEL RESONANT CIRCUITS	E288	E2-16 DO YOU DESOLDER CONNECTIONS USING VACUUM DESOLDERING TOOLS
D257	D3-19 DO THE FILTERS YOU WORK WITH USE SERIES-PARALLEL CIRCUITS	E289	E2-17 DO YOU CUT COMPONENT LEADS TO REMOVE COMPONENTS
D258	D3-20 DO THE FILTERS YOU WORK WITH USE SERIES RESONANT CIRCUITS	E290	E2-18 DO YOU CRUSH COMPONENTS FOR REMOVAL
		E291	E2-19 DO YOU MAKE HARDWIRE CONNECTIONS
D259	D3-21 DON'T REMEMBER WHICH TYPE OF BASIC CIRCUIT	E292	E2-20 DO YOU MAKE PRINTED CIRCUIT BOARD CONNECTIONS
D260	D3-22 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CAPACITANCE OR INDUCTANCE VALUES REQUIRED FOR SPECIFIC FILTERS	E293	E2-21 DO YOU SOLDER PASSIVE COMPONENTS SUCH AS RESISTORS OR CAPACITORS ON PRINTED CIRCUIT BOARDS
		E294	E2-22 DO YOU SOLDER ACTIVE COMPONENTS SUCH AS SOLID-STATE DIODES OR TRANSISTORS ON PRINTED CIRCUIT BOARDS
E	COUPLING, SOLDERING, AND RELAYS	E295	E3-01 DO YOU WORK WITH RELAYS ON YOUR PRESENT JOB
		E296	E3-02 DO YOU ADJUST RELAYS
		E297	E3-03 DO YOU CLEAN RELAYS
E261	E1-01 DO YOU WORK WITH COUPLING DEVICES IN YOUR PRESENT JOB	E298	E3-04 DO YOU INSPECT RELAYS
E262	E1-02 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH RC COUPLING	E299	E3-05 DO YOU REMOVE OR REPLACE PARTS OR RELAYS
		E300	E3-06 DO YOU REMOVE OR REPLACE PARTS OR RELAYS
E263	E1-03 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH IMPEDANCE COUPLING	E301	E3-07 DO YOU TROUBLESHOOT RELAYS
		E302	E3-08 DO YOU STRAIGHTEN RELAY CONTACTS
		E303	E3-09 DO YOU PERFORM TASKS ON RELAY CONTACTS
E264	E1-04 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO	E304	E3-10 DO YOU PERFORM TASKS ON RELAY COILS
		E305	E3-11 DO YOU PERFORM TASKS ON RELAY COILS

E306 E3-12 DO YOU PERFORM TASKS ON RELAY ARMATURES	F393 F3-02 DO YOU USE OSCILLOSCOPES TO PERFORM OPERATIONAL CHECKS
E307 E3-13 DO YOU PERFORM TASKS ON RELAY SPRINGS	F394 F3-03 DO YOU USE OSCILLOSCOPES TO PERFORM ALIGNMENTS OR ADJUSTMENTS
E308 E3-14 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY OPEN (NO) SCHEMATIC SYMBOLS FOR RELAYS	F395 F3-04 DO YOU USE OSCILLOSCOPES TO TROUBLESHOOT ELECTRONIC CIRCUITS
E309 E3-15 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY CLOSED (NC) SCHEMATIC SYMBOLS FOR RELAYS	F396 F3-05 DO YOU USE OSCILLOSCOPES TO MEASURE FREQUENCY
E310 E3-16 DO YOU USE OR REFER TO SINGLE POLE, DOUBLE THROW (SPDT) SCHEMATIC SYMBOLS FOR RELAYS	F397 F3-06 DO YOU USE OSCILLOSCOPES TO MEASURE TIME
E311 E3-17 DO YOU USE OR REFER TO DOUBLE POLE, DOUBLE THROW (DPDT) SCHEMATIC SYMBOLS FOR RELAYS	F398 F3-07 DO YOU USE OSCILLOSCOPES TO OBSERVE LIAJIOUS PATTERNS
E312 E3-18 DO YOU USE OR REFER TO OTHER RELAY SYMBOLS SCHEMATIC SYMBOLS FOR RELAYS	F399 F3-08 DO YOU USE OSCILLOSCOPES TO OBSERVE SIGNALS WHILE UTILIZING ATTENUATOR PROBES
E313 E3-19 DO YOU CHECK ELECTRICAL CONTINUITY OF COILS BY MEASURING RESISTANCE	F380 F3-09 DO YOU USE OSCILLOSCOPES TO MAKE FREQUENCY OR TIME MEASUREMENTS USING DELAY TIME MULTIPLIERS
F MICROPHONES, SPEAKERS, AND OSCILLOSCOPES	F381 F3-10 DO YOU USE OSCILLOSCOPES TO MEASURE AC VOLTAGE
F319 F1-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH MICROPHONES	F382 F3-11 DO YOU USE OSCILLOSCOPES TO MEASURE OR OBSERVE SIGNALS AFTER FIRST ADJUSTING THE GAIN AND DC BAL CONTROLS
F315 F1-02 DO YOU INSPECT MICROPHONES	F383 F3-12 DO YOU USE OSCILLOSCOPES TO MEASURE DC VOLTAGE
F316 F1-03 DO YOU CLEAN MICROPHONES	6 SEMICONDUCTOR DIODES, TRANSISTORS, AND TRANSISTOR AMPLIFIERS
F317 F1-04 DO YOU OPERATE MICROPHONES	6384 G1-01 DO YOU WORK WITH SEMICONDUCTOR DIODES IN YOUR PRESENT JOB
F318 F1-05 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS BUT DO NOT TROUBLESHOOT DOWN TO COMPONENT PARTS OR MICROPHONES	6385 G1-02 DO YOU INSPECT DIODES
F319 F1-06 DO YOU TROUBLESHOOT DOWN TO MICROPHONE PARTS	6386 G1-03 DO YOU REMOVE OR REPLACE DIODES
F320 F1-07 DO YOU REMOVE OR REPLACE COMPLETE MICROPHONES	6387 G1-04 DO YOU CHECK DIODES USING AN INSTRUMENT
F321 F1-08 DO YOU REMOVE OR REPLACE MICROPHONE PARTS	6388 G1-05 DO YOU USE ENERGY LEVEL DIAGRAMS IN YOUR WORK WITH DIODES
F322 F1-09 DO YOU PERFORM TASKS ON CARBON MICROPHONES	6389 G1-06 DO YOU USE PN JUNCTION DIODE CHARACTERISTIC CURVES, TOGETHER WITH VALUES OF FORWARD AND REVERSE BIAS VOLTAGE, TO COMPUTE FORWARD OR REVERSE LIAS RESISTANCE
F323 F1-10 DO YOU PERFORM TASKS ON CAPACITOR MICROPHONES	6390 G1-07 DO YOU COMPUTE FORWARD OR REVERSE BIAS RESISTANCE FOR DIODES
F324 F1-11 DO YOU PERFORM TASKS ON CRYSTAL MICROPHONES	6391 G1-08 DO YOU USE OR REFER TO THE GENERAL RULE THAT TEMPERATURE CAN AFFECT THE OPERATION OF DIODES
F325 F1-12 DO YOU PERFORM TASKS ON DYNAMIC MICROPHONES	6392 G1-09 DO YOU IDENTIFY SEMICONDUCTOR DIODES AS OPPOSED TO OTHER ELECTRONIC COMPONENTS, SUCH AS RESISTORS, BASED ON THEIR PHYSICAL APPEARANCE
F326 F1-13 DO YOU PERFORM TASKS ON VELOCITY RIBBON MICROPHONES	6393 G1-10 DO YOU REFER TO OR DO YOU DETERMINE THE GENERAL EFFECTS OF DOPING ON CURRENT FLOW
F327 F2-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH SPEAKERS	6394 G1-11 DO YOU USE OR REFER TO MEASUREMENTS OF FORWARD BIAS RESISTANCE
F328 F2-02 DO YOU INSPECT SPEAKERS	6395 G1-12 DO YOU USE OR REFER TO DIODE COLOR CODING
F329 F2-03 DO YOU CLEAN SPEAKERS	6396 G1-13 DO YOU USE OR REFER TO CENTRIFUGAL FORCE OF AN ELECTRON IN ORBIT AROUND A NUCLEUS
F330 F2-04 DO YOU OPERATE SPEAKERS	6397 G1-14 DO YOU USE OR REFER TO CENTRIFUGAL FORCE OF AN ELECTRON IN ORBIT AROUND A NUCLEUS
F331 F2-05 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS BUT DO NOT TROUBLESHOOT DOWN TO COMPONENT PARTS OF SPEAKERS	6398 G1-15 DO YOU USE OR REFER TO DIODE NUMBERING SYSTEM, SUCH AS IN 538
F332 F2-06 DO YOU TROUBLESHOOT DOWN TO SPEAKER PARTS	6399 G1-16 DO YOU USE OR REFER TO KINETIC ENERGY OF AN ELECTRON MOVING IN ORBIT
F333 F2-07 DO YOU REMOVE OR REPLACE COMPLETE SPEAKERS	6370 G1-17 DO YOU USE OR REFER TO POTENTIAL ENERGY OF AN
F334 F2-08 DO YOU REMOVE OR REPLACE SPEAKER PARTS	
F335 F2-09 DO YOU PERFORM ANY TASKS ON SPEAKER CONES	
F336 F2-10 DO YOU PERFORM ANY TASKS ON SPEAKER SPIDERS	
F337 F2-11 DO YOU PERFORM ANY TASKS ON SPEAKER FIELD COILS	
F338 F2-12 DO YOU PERFORM ANY TASKS ON SPEAKER VOICE COILS	
F339 F2-13 DO YOU PERFORM ANY TASKS ON SPEAKER PERMANENT MAGNETS	
F340 F2-14 DO YOU PERFORM ANY TASKS ON SPEAKER ELECTROMAGNETS	
F341 F2-15 DO YOU PERFORM ANY TASKS ON SPEAKER SORT IRON CONES	
F342 F3-01 DO YOU USE OSCILLOSCOPES IN YOUR PRESENT JOB	

ELECTRON MOVING IN ORBIT		SEMICONDUCTORS	
6371 61-18 DO YOU USE OR REFER TO MEASUREMENTS OF REVERSE BIAS RESISTANCE	6396 61-43 DO YOU USE OR REFER TO RELATIONSHIP BETWEEN BARRIER WIDTH AND DIFFERENCE OF POTENTIAL		
6372 61-19 DO YOU USE OR REFER TO NUMBER OF ELECTRONS IN A PARTICULAR SHELL OR ORBIT	6397 61-44 DO YOU USE OR REFER TO THE ID11 BACK TO FRONT RESISTANCE RATIO FOR DIODES		
6373 61-20 DO YOU USE OR REFER TO PERMISSIBLE ENERGY LEVELS OF AN ORBITING ELECTRON	6398 61-45 DO YOU USE OR REFER TO BARRIER HEIGHT IN SEMICONDUCTORS		
6374 61-21 DO YOU USE OR REFER TO FORBIDDEN ENERGY LEVELS OF AN ORBITING ELECTRON	6399 61-46 DO YOU USE OR REFER TO DIODE SUBSTITUTION INFORMATION		
6375 61-22 DO YOU USE OR REFER TO VALENCE ELECTRONS (THOSE IN THE OUTERMOST SHELL)	6400 61-47 DO YOU USE OR REFER TO MAXIMUM AVERAGE FORWARD CURRENT DIODE RATINGS		
6376 61-23 DO YOU USE OR REFER TO ATOMIC NUMBER (TOTAL NUMBER OF ELECTRONS IN ATOM)	6401 61-48 DO YOU USE OR REFER TO PEAK RECURRENT FORWARD CURRENT DIODE RATINGS		
6377 61-24 DO YOU USE OR REFER TO SYMBOLS ON THE DIODE WHICH INDICATE THE CATHODE END	6402 61-49 DO YOU USE OR REFER TO MAXIMUM SURGE CURRENT DIODE RATINGS		
6378 61-25 DO YOU NEED TO KNOW WHICH MATERIALS ARE USED IN THE CONSTRUCTION OF DIODES SUCH AS GERMANIUM OR SILICON	6403 61-50 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE DIODE RATINGS		
6379 61-26 DO YOU NEED TO KNOW THAT SEMICONDUCTORS HAVE NEGATIVE TEMPERATURE COEFFICIENTS OF RESISTANCE (AS TEMPERATURE INCREASES RESISTANCE DECREASES)	6404 62-01 DO YOU WORK WITH TRANSISTORS IN YOUR PRESENT JOB.		
6380 61-27 DO YOU USE OR REFER TO PN JUNCTION DIODE CHARACTERISTIC CURVES, SUCH AS VOLTAGE - CURRENT	6405 62-02 DO YOU INSPECT TRANSISTORS		
6381 61-28 DO YOU DETERMINE WHETHER PN JUNCTION DIODES ARE FORWARD BIASED OR REVERSE BIASED WHEN YOU READ OR INTERPRET CIRCUIT DIAGRAMS	6406 62-03 DO YOU REMOVE OR REPLACE TRANSISTORS		
6382 61-29 DO YOU USE OR REFER TO VALENCE BAND IN SEMICONDUCTOR MATERIALS	6407 62-04 DO YOU CHECK TRANSISTORS USING AN INSTRUMENT		
6383 61-30 DO YOU USE OR REFER TO FORBIDDEN BAND IN SEMICONDUCTOR MATERIALS	6408 62-05 DO YOU USE OR REFER TO EMITTER - BASE (EB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS		
6384 61-31 DO YOU USE OR REFER TO CONDUCTION BAND IN SEMICONDUCTOR MATERIALS	6409 62-06 DO YOU USE OR REFER TO COLLECTOR - BASE (CB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS		
6385 61-32 DO YOU USE OR REFER TO COVALENT BONDING IN SEMICONDUCTOR MATERIALS	6410 62-07 DO YOU USE OR REFER TO EMITTER - COLLECTOR (EC) RESISTANCE MEASUREMENTS		
6386 61-33 DO YOU USE OR REFER TO ELECTRON-HOLE PAIR CREATED IN SEMICONDUCTORS	6411 62-08 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE EMITTER - BASE JUNCTION		
6387 61-34 DO YOU USE OR REFER TO ELECTRON FLOW OR HOLE FLOW IN SEMICONDUCTORS	6412 62-09 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE COLLECTOR - BASE JUNCTION		
6388 61-35 DO YOU USE OR REFER TO DONOR IMPURITY IN SEMICONDUCTORS	6413 62-10 DO YOU USE OR REFER TO THE PHYSICAL SIZE OF THE TRANSISTOR STRUCTURE (COLLECTOR, BASE AND EMITTER)		
6389 61-36 DO YOU USE OR REFER TO ACCEPTOR IMPURITY IN SEMICONDUCTORS	6414 62-11 DO YOU USE OR REFER TO LEAKAGE CURRENT (ICBO) IN A TRANSISTOR		
6390 61-37 DO YOU USE OR REFER TO P-TYPE SEMICONDUCTOR MATERIAL	6415 62-12 DO YOU USE OR REFER TO TRANSISTOR SCHEMATIC SYMBOLS		
6391 61-38 DO YOU USE OR REFER TO N-TYPE SEMICONDUCTOR MATERIAL	6416 62-13 DO YOU USE OR REFER TO TRANSISTOR NOTATION SUCH AS Q1, Q2, Q3, ETC		
6392 61-39 DO YOU USE OR REFER TO MAJORITY CARRIERS IN SEMICONDUCTORS	6417 62-14 DO YOU USE OR REFER TO TRANSISTOR SUBSTITUTION INFORMATION		
6393 61-40 DO YOU USE OR REFER TO MINORITY CARRIERS IN SEMICONDUCTORS	6418 62-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE TRANSISTOR BASE CURRENT IB IS NORMALLY SIGNIFICANTLY SMALLER THAN THE EMITTER CURRENT IE (USUALLY IB BEING 2 TO 8 PERCENT OF IE)		
6394 61-41 DO YOU USE OR REFER TO JUNCTION RECOMBINATION IN SEMICONDUCTORS	6419 62-16 DO YOU USE THE INFORMATION THAT THE EFFECT OF EMITTER BASE VOLTAGE ON BASE CURRENT IS THE CONTROLLING FACTOR FOR TRANSISTORS		
6395 61-42 DO YOU USE OR REFER TO DEPLETION REGION IN SEMICONDUCTORS	6420 62-17 DO YOU USE THE GENERAL RULE THAT LEAKAGE CURRENT (ICBO) IN A TRANSISTOR INCREASES AS TEMPERATURE INCREASES		
	6421 62-18 DO YOU USE OR REFER TO TRANSISTOR CHARACTERISTIC CURVES		
	6422 62-19 DO YOU USE OR REFER TO BETA TRANSISTOR GAINS		

6423 62-20 DO YOU USE OR REFER TO ALPHA TRANSISTOR GAINS	
6424 62-21 DO YOU USE OR REFER TO GAMMA TRANSISTOR GAINS	
6425 62-22 DO YOU CALCULATE BETA TRANSISTOR GAINS	6449 62-22 DO YOU CALCULATE THE POWER GAIN FOR A SPECIFIC TRANSISTOR USING A FORMULA THAT IS, DO YOU MULTIPLY THE CURRENT GAIN TIMES THE VOLTAGE GAIN TO DETERMINE THE
6426 62-23 DO YOU CALCULATE ALPHA TRANSISTOR GAINS	
6427 62-24 DO YOU CALCULATE GAMMA TRANSISTOR GAINS	
6428 63-01 DO YOU WORK WITH TRANSISTOR AMPLIFIERS IN YOUR	6450 63-23 DO YOU NEED TO KNOW THAT MORE COLLECTOR CURRENT IS GENERATED WITH LESS COLLECTOR VOLTAGE AS TEMPERATURE INCREASES (THIS AFFECTS THE STATIC OPERATING POINT Q) OF THE TRANSISTOR)
PRESENT JOB	6451 63-24 DO YOU COMPUTE THE STATIC OPERATING POINT Q) OF A TRANSISTOR AT DIFFERENT TEMPERATURES
6429 63-02 DO YOU INSPECT TRANSISTOR AMPLIFIERS	
6430 63-03 DO YOU ALIGN OR ADJUST TRANSISTOR AMPLIFIERS	
6431 63-04 DO YOU TROUBLESHOOT TO THE AMPLIFIER CIRCUIT LEVEL	6452 63-25 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH SELF-BIAS STABILIZATION
6432 63-05 DO YOU TROUBLESHOOT TO AMPLIFIER COMPONENTS	
6433 63-06 DO YOU REMOVE OR REPLACE THE COMPLETE AMPLIFIER	
6434 63-07 DO YOU REMOVE OR REPLACE AMPLIFIER COMPONENTS	
6435 63-08 DO YOU USE OR REFER TO (COMMON EMITTER) THE CHANGE IN COLLECTOR CURRENT WHICH RESULTS FROM A CHANGE IN BASE CURRENT	6453 63-26 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH SELF-BIAS STABILIZATION
6436 63-09 DO YOU USE OR REFER TO (COMMON EMITTER) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN COLLECTOR CURRENT WHICH RESULTS FROM A SPECIFIC CHANGE IN BASE CURRENT	6454 63-27 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH THERMISTOR STABILIZATION
6437 63-10 DO YOU USE OR REFER TO (COMMON EMITTER) THE CHANGE IN COLLECTOR VOLTAGE WHICH RESULTS FROM A CHANGE IN BASE CURRENT	6455 63-28 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH FORWARD BIAS DIODE STABILIZATION
6438 63-11 DO YOU USE OR REFER TO (COMMON EMITTER) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN COLLECTOR VOLTAGE WHICH RESULTS FROM A SPECIFIC CHANGE IN BASE CURRENT	6456 63-29 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH REVERSE BIAS DIODE STABILIZATION
6439 63-12 DO YOU USE OR REFER TO (COMMON EMITTER) THE CHANGE IN BASE CURRENT	6457 63-30 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH DOUBLE DIODE STABILIZATION
6440 63-13 DO YOU USE OR REFER TO (COMMON EMITTER) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN BASE CURRENT WHICH RESULTS FROM A SPECIFIC INPUT SIGNAL	6458 63-31 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM EMITTER (SWAMPING) RESISTOR STABILIZATION
6441 63-14 DO YOU USE THE LOAD-LINE METHOD OF ANALYSIS IN YOUR CIRCUIT ANALYSIS (THIS METHOD REQUIRES YOU TO PLOT A LOAD-LINE ON A TRANSISTOR CHARACTERISTIC CURVE)	6459 63-32 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM SELF-BIAS STABILIZATION
6442 63-15 DO YOU USE OR REFER TO THE OPERATING POINT Q (QUIESCENT POINT) FOR A TRANSISTOR	6460 63-33 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM THERMISTOR STABILIZATION
6443 63-16 DO YOU CALCULATE THE SPECIFIC QUIESCENT POINT FOR A PARTICULAR TRANSISTOR	6461 63-34 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM FORWARD BIAS DIODE STABILIZATION
6444 63-17 DO YOU MEASURE VOLTAGE GAIN USED IN THE COMMON EMITTER CONFIGURATION	6462 63-35 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM REVERSE BIAS DIODE STABILIZATION
6445 63-18 DO YOU MEASURE CURRENT GAIN USED IN THE COMMON EMITTER CONFIGURATION	6463 63-36 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM DOUBLE DIODE STABILIZATION
6446 63-19 DO YOU MEASURE POWER GAIN USED IN THE COMMON EMITTER CONFIGURATION	6464 63-37 DO YOU IDENTIFY AMPLITUDE DISTORTION FOR TRANSISTOR CIRCUITS
6447 63-20 DO YOU CALCULATE THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS USING A FORMULA THAT IS, DO YOU DIVIDE THE CHANGE IN BASE-EMITTER VOLTAGE INTO THE CHANGE THE BASE COLLECTOR VOLTAGE TO DETERMINE THE VOLTAGE GAIN	6465 63-38 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF AMPLITUDE DISTORTION
6448 63-21 DO YOU CALCULATE THE CURRENT GAIN FOR SPECIFIC TRANSISTORS USING A FORMULA THAT IS, DO YOU DIVIDE THE CHANGE IN BASE CURRENT INTO THE CHANGE IN COLLECTOR	6466 63-39 DO YOU IDENTIFY FREQUENCY DISTORTION FOR TRANSISTOR CIRCUITS
	6467 63-40 DO YOU IDENTIFY PHASE DISTORTION FOR TRANSISTOR CIRCUITS
	6468 63-41 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF PHASE DISTORTION
	6469 63-42 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE

CAUSES OF FREQUENCY DISTORTION	
6470 63-43 DO YOU NEED TO KNOW THE DEGENERATIVE EFFECTS ON THE CIRCUIT CAUSED BY CHANGING EMITTER RESISTANCE FOR TRANSISTOR AMPLIFIERS IN THE COMMON COLLECTOR CONFIGURATION	INPUT L-TYPE FILTERS
6471 63-44 DO YOU DETERMINE THE CLASS OF OPERATION FOR AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS	M507 M2-25 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE INPUT L-TYPE FILTERS
6472 63-45 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS	M508 M2-26 DO YOU WORK WITH CIRCUITS WHICH EMPLOY LC PI-TYPE FILTERS
6473 63-46 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS	M509 M2-27 DO YOU WORK WITH CIRCUITS WHICH EMPLOY RC PI-TYPE FILTERS
6474 63-47 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY CIRCUITS	M510 M2-28 DO YOU WORK WITH CIRCUITS WHICH EMPLOY DON'T REMEMBER WHICH TYPE OF FILTER
6475 63-48 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS	M511 M2-29 DO YOU HAVE THE OPTION OF REPLACING ONE TYPE OF FILTER WITH A DIFFERENT TYPE FILTER
6476 63-49 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS	M512 M3-01 DO YOU WORK WITH OSCILLATORS IN YOUR PRESENT JOB
M SOLID STATE SPECIAL PURPOSE DEVICES, POWER SUPPLIES, AND OSCILLATORS	
4477 M1-01 DO YOU USE OR REFER TO VARACTORS	M513 M3-02 DO YOU INSPECT OSCILLATORS
4478 M1-02 DO YOU USE OR REFER TO TUNNEL DIODES	M514 M3-03 DO YOU ALIGN OR ADJUST OSCILLATORS
4479 M1-03 DO YOU USE OR REFER TO FIELD EFFECT TRANSISTORS (FET)	M515 M3-04 DO YOU REMOVE OR REPLACE COMPLETE OSCILLATORS
4480 M1-04 DO YOU USE OR REFER TO UNIJUNCTION TRANSISTORS	M516 M3-05 DO YOU REMOVE OR REPLACE OSCILLATOR COMPONENTS
4481 M1-05 DO YOU USE OR REFER TO ZENER DIODES	M517 M3-06 DO YOU TROUBLESHOOT TO OSCILLATOR CIRCUIT LEVEL
4482 M1-06 DO YOU USE OR REFER TO INTEGRATED CIRCUITS	M518 M3-07 DO YOU TROUBLESHOOT TO OSCILLATOR COMPONENTS
4483 M2-01 IN YOUR PRESENT JOB, DO YOU WORK WITH POWER SUPPLIES	M519 M3-08 DO YOU USE OR REFER TO FEEDBACK
4484 M2-02 DO YOU INSPECT POWER SUPPLIES	M520 M3-09 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)
4485 M2-03 DO YOU CLEAN POWER SUPPLIES	M521 M3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY
4486 M2-04 DO YOU ALIGN OR ADJUST POWER SUPPLIES	M522 M3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY
4487 M2-05 DO YOU TROUBLESHOOT TO POWER SUPPLY CIRCUIT LEVEL	M523 M3-12 DO YOU USE OR REFER TO DAMPING
4488 M2-06 DO YOU TROUBLESHOOT TO POWER SUPPLY COMPONENTS	M524 M3-13 DO YOU USE OR REFER TO REGENERATIVE FEEDBACK
4489 M2-07 DO YOU REMOVE OR REPLACE COMPLETE POWER SUPPLIES	M525 M3-14 DO YOU USE OR REFER TO PIEZOELECTRIC EFFECT
4490 M2-08 DO YOU REMOVE OR REPLACE POWER SUPPLY COMPONENTS	M526 M3-15 DO YOU USE OR REFER TO CRITICAL DAMPING
4491 M2-09 DO YOU WORK WITH HALF-WAVE RECTIFIERS	M527 M3-16 DO YOU USE OR REFER TO UNDER DAMPING
4492 M2-10 DO YOU WORK WITH FULL-WAVE RECTIFIERS OTHER THAN BRIDGE RECTIFIERS	M528 M3-17 DO YOU USE OR REFER TO OVER DAMPING
4493 M2-11 DO YOU WORK WITH BRIDGE RECTIFIERS	M529 M3-18 DO YOU WORK WITH OSCILLATORS WHICH USE LC TANK CIRCUITS AS FDD
4494 M2-12 DO YOU WORK WITH THREE-PHASE RECTIFIERS	M530 M3-19 DO YOU WORK WITH OSCILLATORS WHICH USE RC NETWORKS AS FDD
4495 M2-13 DO YOU USE OR REFER TO INPUT VOLTAGE	M531 M3-20 DO YOU WORK WITH OSCILLATORS WHICH USE CRYSTALS AS FDD
4496 M2-14 DO YOU USE OR REFER TO INPUT FREQUENCY	M532 M3-21 DO YOU WORK WITH OSCILLATORS WHICH USE DON'T REMEMBER WHICH TYPE OF FDD
4497 M2-15 DO YOU USE OR REFER TO PEAK OUTPUT VOLTAGE	M533 M3-22 DO YOU WORK WITH SERIES HARTLEY SINUSOIDAL OSCILLATORS
4498 M2-16 DO YOU USE OR REFER TO AVERAGE OUTPUT VOLTAGE	M534 M3-23 DO YOU WORK WITH SHUNT HARTLEY SINUSOIDAL OSCILLATORS
4499 M2-17 DO YOU USE OR REFER TO RIPPLE AMPLITUDE	M535 M3-24 DO YOU WORK WITH COLPITTS SINUSOIDAL OSCILLATORS
4500 M2-18 DO YOU USE OR REFER TO RIPPLE FREQUENCY	M536 M3-25 DO YOU WORK WITH CLAPP SINUSOIDAL OSCILLATORS
4501 M2-19 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE	M537 M3-26 DO YOU WORK WITH BUTLER SINUSOIDAL OSCILLATORS
4502 M2-20 DO YOU USE OR REFER TO SHAPE OF OUTPUT WAVEFORMS	M538 M3-27 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE OF OSCILLATORS
I MULTIVIBRATORS, LIMITERS, CLAMPERS, AND ELECTRON TUBES	
4503 M2-21 DO YOU USE OR REFER TO EFFECTIVE OUTPUT VOLTAGE	
4504 M2-22 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE FILTERS	
4505 M2-23 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE FILTERS	
4506 M2-24 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE	
	1539 11-01 DO YOU WORK WITH MULTIVIBRATORS IN YOUR PRESENT JOB
	1540 11-02 DO YOU INSPECT WAVE GENERATING OR SHAPING CIRCUITS
	1541 11-03 DO YOU ALIGN OR ADJUST WAVE GENERATING OR SHAPING CIRCUITS

1542 11-04 DO YOU CALIBRATE WAVE GENERATING OR SHAPING CIRCUITS	1581 13-17 DO YOU USE OR REFER TO GRID VOLTAGE
1543 11-05 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUITS	1582 13-18 DO YOU USE OR REFER TO GRID CURRENT
1544 11-06 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUIT COMPONENTS	1583 13-19 DO YOU USE OR REFER TO CATHODE VOLTAGE
1545 11-07 DO YOU REMOVE OR REPLACE COMPLETE WAVE GENERATING OR SHAPING CIRCUITS	1584 13-20 DO YOU USE OR REFER TO CATHODE CURRENT
1546 11-08 DO YOU REMOVE OR REPLACE WAVE GENERATING OR SHAPING COMPONENTS	1585 13-21 DO YOU USE OR REFER TO THE TRIODE AMPLIFICATION FACTOR (THE AMPLIFICATION FACTOR FOR TRIODES IS DEFINED AS THE RATIO OF CHANGE IN PLATE VOLTAGE TO A CHANGE IN GRID VOLTAGE)
1547 11-09 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN LC TANK CIRCUITS	1586 13-22 DO YOU CALCULATE ACTUAL VALUES OF TRIODE AMPLIFICATION FACTORS
1548 11-10 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN RC NETWORKS	1587 13-23 DO YOU USE OR REFER TO MULTIGRID (TETRODE, PENTODE, ETC) AMPLIFICATION FACTORS
1549 11-11 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN CRYSTALS	1588 13-24 DO YOU USE OR REFER TO ELECTRON TUBE TRANSCONDUCTANCE (G _m), WHICH IS MEASURED IN MHOS)
1550 11-12 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN DON'T REMEMBER WHICH TYPE OF FOD	1589 13-25 DO YOU CALCULATE ACTUAL VALUES OF ELECTRON TUBE TRANSCONDUCTANCES
1551 11-13 DO YOU WORK WITH ASTABLE MULTIVIBRATORS	1590 13-26 DO YOU USE OR REFER TO THE ELECTRON TUBE PARAMETER CALLED AC PLATE RESISTANCE
1552 11-14 DO YOU WORK WITH MONOSTABLE MULTIVIBRATORS	1591 13-27 DO YOU CALCULATE ACTUAL VALUES OF AC PLATE RESISTANCE
1553 11-15 DO YOU WORK WITH BISTABLE MULTIVIBRATORS	1592 13-28 DO YOU USE OR REFER TO ELECTRON TUBE INTERELECTRODE CAPACITANCE
1554 11-16 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE MULTIVIBRATORS	1593 13-29 DO YOU USE OR REFER TO CHARACTERISTIC CURVES IN YOUR WORK WITH ELECTRON TUBES
1555 12-01 DO YOU WORK WITH LIMITERS OR CLAMPERS IN YOUR PRESENT JOB	1594 13-30 DO YOU USE CHARACTERISTIC CURVES TO SELECT PLATE VOLTAGE FOR A SPECIFIED BIAS
1556 12-02 DO YOU WORK WITH SERIES DIODE LIMITERS	1595 13-31 DO YOU USE CHARACTERISTIC CURVES TO SELECT PLATE CURRENT FOR A SPECIFIED BIAS
1557 12-03 DO YOU WORK WITH SHUNT DIODE LIMITERS	1596 13-32 DO YOU USE CHARACTERISTIC CURVES TO SELECT BIAS REQUIRED FOR CUTOFF
1558 12-04 DO YOU WORK WITH LIMITERS WITH BIAS	1597 13-33 DO YOU USE CHARACTERISTIC CURVES TO SELECT BIAS REQUIRED FOR SATURATION
1559 12-05 DO YOU WORK WITH ZENER DIODE LIMITERS	1598 13-34 DO YOU USE OR REFER TO ELECTRON TUBE AMPLIFIER GAIN
1560 12-06 DO YOU WORK WITH TRANSISTOR LIMITERS	1599 13-35 DO YOU USE OR REFER TO ELECTRON TUBE AMPLIFIER EFFICIENCY
1561 12-07 DO YOU WORK WITH DON'T KNOW WHICH TYPE OF LIMITERS	1600 13-36 DO YOU USE TEST TUBE CHECKERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN
1562 12-08 DO YOU WORK WITH BASIC DIODE CLAMPING CIRCUITS	1601 13-37 DO YOU USE MULTIMETERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN
1563 12-09 DO YOU WORK WITH DIODE CLAMPING CIRCUITS WITH BIAS	1602 13-38 DO YOU USE OSCILLOSCOPES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN
1564 12-10 DO YOU WORK WITH DON'T KNOW WHICH TYPE OF CLAMPING CIRCUIT	1603 13-39 DO YOU USE CHARACTERISTIC CURVES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN
1565 13-01 IN YOUR PRESENT JOB, DO YOU WORK ON EQUIPMENT WHICH CONTAINS ELECTRON TUBES	1604 13-40 DO YOU CALCULATE ANY ELECTRON TUBE CAPACITANCES SUCH AS INPUT CAPACITANCE
1566 13-02 DO YOU CHECK ELECTRON TUBES TO SEE IF THEY ARE GOOD	1605 13-41 DO YOU USE OR REFER TO TUBE SOCKET NOTATION
1567 13-03 DO YOU USE TUBE TESTERS TO CHECK ELECTRON TUBES	1606 13-42 DO YOU USE OR REFER TO PIN NUMBERING SYSTEMS
1568 13-04 DO YOU USE MULTIMETERS TO CHECK ELECTRON TUBES	1607 13-43 DO YOU USE OR REFER TO THE TYPE OF MATERIAL OR THE OPERATING TEMPERATURE OF THE EMISSION SURFACE IN THE ELECTRON TUBES YOU WORK ON
1569 13-05 DO YOU USE SCOPES TO CHECK ELECTRON TUBES	1608 13-44 DO YOU USE OR REFER TO TUBE SUBSTITUTION MATERIAL SUCH AS MANUALS OR CHARTS
1570 13-06 DO YOU USE SUBSTITUTION TO CHECK ELECTRON TUBES	
1571 13-07 DO YOU USE OR REFER TO CUTOFF	
1572 13-08 DO YOU USE OR REFER TO PEAK INVERSE VOLTAGE RATING	
1573 13-09 DO YOU USE OR REFER TO PEAK CURRENT RATING	
1574 13-10 DO YOU USE OR REFER TO TRANSIT TIME	
1575 13-11 DO YOU USE OR REFER TO PLATE DISSIPATION RATING	
1576 13-12 DO YOU USE OR REFER TO SATURATION	
1577 13-13 DO YOU USE OR REFER TO DC PLATE RESISTANCE	
1578 13-14 DO YOU COMPUTE ACTUAL VALUES OF THE DC PLATE RESISTANCE FOR ELECTRON TUBES	
1579 13-15 DO YOU USE OR REFER TO PLATE VOLTAGE	
1580 13-16 DO YOU USE OR REFER TO PLATE CURRENT	

J	ELECTRON TUBE AMPLIFIERS AND CIRCUITS, SPECIAL PURPOSE ELECTRON TUBES, METODYNING, MODULATION,	K	AM SYSTEMS, FM SYSTEMS, AND NUMBERING SYSTEMS
J609 J1-01 DO YOU WORK WITH ELECTRON TUBE AMPLIFIERS OR CIRCUITS IN YOUR PRESENT JOB		K638 K1-01 DO YOU WORK ON AM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	
J610 J1-02 DO YOU DETERMINE THE CLASS OF OPERATION FOR ELECTRON TUBE AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS		K639 K1-02 DO YOU INSPECT AM TRANSMIT OR RECEIVE SYSTEMS	
J611 J1-03 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS		K640 K1-03 DO YOU CLEAN AM TRANSMIT OR RECEIVE SYSTEMS	
J612 J1-04 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS		K641 K1-04 DO YOU ALIGN OR ADJUST AM TRANSMIT OR RECEIVE SYSTEMS	
J613 J1-05 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS		K642 K1-05 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE SYSTEMS	
J614 J1-06 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS		K643 K1-06 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE COMPONENTS	
J615 J1-07 DO YOU TROUBLESHOOT OR REPAIR DON'T KNOW WHICH TYPE OF AMPLIFIER		K644 K1-07 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE SYSTEMS	
J616 J2-01 DO YOU WORK WITH GAS TUBES (HOT CATHODE OR COLD CATHODE)		K645 K1-08 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE COMPONENTS	
J617 J2-02 DO YOU WORK WITH CATHODE-RAY TUBES		K646 K1-09 DO YOU PERFORM TASKS ON RF OSCILLATORS	
J618 J2-03 DO YOU USE OR REFER TO THE CHARACTERISTICS OF BEAM POWER TUBES		K647 K1-10 DO YOU PERFORM TASKS ON RF AMPLIFIERS	
J619 J2-04 DO YOU TROUBLESHOOT OR REPAIR CIRCUITS IN WHICH BEAM POWER TUBES ARE USED		K648 K1-11 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS	
J620 J2-05 DO YOU USE OR REFER TO THE CHARACTERISTICS OF THYRATONS		K649 K1-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS	
J621 J2-06 DO YOU TROUBLESHOOT OR REPAIR CIRCUITS IN WHICH THYRATONS ARE USED		K650 K1-13 DO YOU PERFORM TASKS ON LOCAL OSCILLATORS	
J622 J2-07 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRON GUNS OF CATHODE-RAY TUBES (CRT)		K651 K1-14 DO YOU PERFORM TASKS ON IF AMPLIFIERS	
J623 J2-08 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROMAGNETIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES (CRT)		K652 K1-15 DO YOU PERFORM TASKS ON DETECTORS	
J624 J2-09 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROSTATIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES (CRT)		K653 K1-16 DO YOU PERFORM TASKS ON DON'T REMEMBER WHICH AM STAGE TRANSMITTERS	
J625 J2-10 DO YOU USE OR REFER TO PHOSPHOR SCREENS		K654 K1-17 DO YOU USE OR REFER TO AMPLITUDE STABILIZATION IN TRANSMITTERS	
J626 J2-11 DO YOU USE OR REFER TO AQUADAG COATINGS		K655 K1-18 DO YOU USE OR REFER TO FREQUENCY STABILIZATION IN TRANSMITTERS	
J627 J2-12 DO YOU USE OR REFER TO ELECTRON OPTICS		K656 K1-19 DO YOU USE OR REFER TO SENSITIVITY OF RECEIVERS	
J628 J2-13 DO YOU USE OR REFER TO PERSISTENCE		K657 K1-20 DO YOU USE OR REFER TO SELECTIVITY OF RECEIVERS	
J629 J2-14 DO YOU USE OR REFER TO DECAY TIMES		K658 K1-21 DO YOU USE OR REFER TO 2ND HARMONIC DISTORTION	
J630 J2-15 DO YOU USE OR REFER TO FLUORESCENCE		K659 K1-22 DO YOU USE OR REFER TO BANDPASS DISTORTION	
J631 J2-16 DO YOU USE OR REFER TO PHOSPHORESCENCE		K660 K1-23 DO YOU USE OR REFER TO SQUARE LAW DISTORTION	
J632 J3-01 DO YOU WORK ON TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB		K661 K1-24 DO YOU USE OR REFER TO CO-CHANNEL INTERFERENCE	
J633 J3-02 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS		K662 K1-25 DO YOU USE OR REFER TO IMAGE FREQUENCIES IN RECEIVERS	
J634 J3-03 DO YOU PERFORM TASKS ON FREQUENCY MIXERS		K663 K1-26 DO YOU USE OR REFER TO SIGNAL TO IMAGE RATIOS OR IMAGE REJECTION RATIOS	
J635 J3-04 DO YOU USE OR REFER TO THE METERYDING OF SIGNALS IN YOUR WORK WITH TRANSMIT OR RECEIVE SYSTEMS		K664 K1-27 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH AM TRANSMITTER SCHEMATIC DIAGRAMS	
J636 J3-05 DO YOU PERFORM TASKS ON REACTANCE MODULATORS		K665 K1-28 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH AM RECEIVER SCHEMATIC DIAGRAMS	
J637 J3-06 DO YOU PERFORM TASKS ON MODULATED OSCILLATORS		K666 K2-01 DO YOU WORK WITH FM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	
		K667 K2-02 DO YOU INSPECT FM TRANSMIT OR RECEIVE SYSTEMS	
		K668 K2-03 DO YOU CLEAN FM TRANSMIT OR RECEIVE SYSTEMS	
		K669 K2-04 DO YOU ALIGN FM TRANSMIT OR RECEIVE SYSTEMS	
		K670 K2-05 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE SYSTEMS	
		K671 K2-06 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE COMPONENTS	
		K672 K2-07 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE SYSTEMS	
		K673 K2-08 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE COMPONENTS	

K679 K2-09 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS	L707 L1-13 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR EXCLUSIVE OR GATES
K675 K2-10 DO YOU PERFORM TASKS ON FREQUENCY MULTIPLIERS	L708 L2-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO BOOLEAN EQUATIONS, LOGIC DIAGRAMS, OR LOGIC CIRCUITS
K676 K2-11 DO YOU PERFORM TASKS ON DRIVERS (INTERMEDIATE AMPLIFIERS)	L709 L2-02 DO YOU DRAW LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUITS
K677 K2-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS	L710 L2-03 DO YOU CONSTRUCT TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS
K678 K2-13 DO YOU PERFORM TASKS ON RF AMPLIFIERS	L711 L2-04 DO YOU DRAW LOGIC DIAGRAMS FROM GIVEN BOOLEAN EQUATIONS
K679 K2-14 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS	L712 L2-05 DO YOU MEASURE INPUTS OR OUTPUTS OF LOGIC GATES
K680 K2-15 DO YOU PERFORM TASKS ON IF AMPLIFIERS	L713 L2-06 DO YOU DEVELOP OR ANALYZE BOOLEAN EQUATIONS IN THE PROCESS OF TROUBLESHOOTING DIGITAL CIRCUITS
K681 K2-16 DO YOU PERFORM TASKS ON LIMITERS	L714 L2-07 DO YOU ANALYZE LOGIC CIRCUITS BY USING BOOLEAN ALGEBRA
K682 K2-17 DO YOU PERFORM TASKS ON FREQUENCY DISCRIMINATORS	L715 L2-08 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUIT GATES
K683 K2-18 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSMITTERS	L716 L2-09 DO YOU USE OR REFER TO TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS
K684 K2-19 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM RECEIVERS	L717 L2-10 DO YOU USE OR REFER TO LOGIC DIAGRAMS CONSISTING OF MORE THAN ONE GATE
K685 K3-01 DO YOU CONVERT DECIMAL (BASE 10) NUMBERS TO OCTAL (BASE 8) NUMBERS	L718 L2-11 DO YOU COMPUTE SUM AND CARRY EXPRESSIONS FOR SERIAL HALF OR FULL ADDER LOGIC DIAGRAMS
K686 K3-02 DO YOU CONVERT DECIMAL NUMBERS TO BINARY (BASE 2) NUMBERS	L719 L2-12 DO YOU TRACE DATA FLOW THROUGH PARALLEL FULL ADDER LOGIC DIAGRAMS
K687 K3-03 DO YOU CONVERT OCTAL NUMBERS TO DECIMAL NUMBERS	L720 L2-13 DO YOU WORK WITH ASTABLE (FREE RUNNING) MULTIVIBRATORS
K688 K3-04 DO YOU CONVERT OCTAL NUMBERS TO BINARY NUMBERS	L721 L2-14 DO YOU WORK WITH BISTABLE (FLIP-FLOP) MULTIVIBRATORS
K689 K3-05 DO YOU CONVERT BINARY NUMBERS TO DECIMAL NUMBERS	L722 L2-15 DO YOU WORK WITH MONOSTABLE (ONE-SHOT) MULTIVIBRATORS
K690 K3-06 DO YOU CONVERT BINARY NUMBERS TO OCTAL NUMBERS	L723 L2-16 DO YOU USE OR REFER TO FLIP-FLOP MULTIVIBRATOR SYMBOLS
K691 K3-07 DO YOU ADD BINARY NUMBERS TO GET A SUM	L724 L2-17 DO YOU USE OR REFER TO SINGLE-SHOT MULTIVIBRATOR SYMBOLS
K692 K3-08 DO YOU SUBTRACT BINARY NUMBERS USING THE END-AROUND-CARRY METHOD	L725 L2-18 DO YOU USE OR REFER TO FLIP-FLOP CIRCUIT DIAGRAMS
K693 K3-09 DO YOU SUBTRACT BINARY NUMBERS USING THE DIRECT SUBTRACTION METHOD	L726 L2-19 DO YOU USE OR REFER TO FLIP-FLOP TRUTH TABLES
K694 K3-10 DO YOU ADD OCTAL NUMBERS TO GET A SUM	L727 L2-20 DO YOU USE OR REFER TO COMPLEMENTED FLIP-FLOP LOGIC SYMBOLS
L LOGIC FUNCTIONS, BOOLEAN EQUATIONS, AND COUNTERS	L728 L2-21 DO YOU USE OR REFER TO COMPLEMENTING FLIP-FLOP LOGIC SYMBOLS
L695 L1-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO LOGIC FUNCTIONS	L729 L2-22 DO YOU MEASURE OUTPUT WAVESHAPES OF LOGIC CIRCUITS
L696 L1-02 DO YOU CONSTRUCT TRUTH TABLES FOR AND LOGIC SYMBOLS	L730 L2-23 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTED FLIP-FLOP SCHEMATIC DIAGRAMS
L697 L1-03 DO YOU CONSTRUCT TRUTH TABLES FOR OR LOGIC SYMBOLS	L731 L2-24 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS
L698 L1-04 DO YOU CONSTRUCT TRUTH TABLES FOR AND OR LOGIC SYMBOLS WITH STATE INDICATORS	L732 L2-25 DO YOU CONSTRUCT TRUTH TABLES FOR J-K FLIP-FLOP LOGIC SYMBOLS
L699 L1-05 DO YOU CONSTRUCT TRUTH TABLES FOR EXCLUSIVE OR LOGIC SYMBOLS OR GATES	L733 L3-01 DO YOU WORK WITH DIGITAL COUNTERS IN YOUR PRESENT JOB
L700 L1-06 DO YOU USE OR REFER TO TRUTH TABLES FOR AND LOGIC SYMBOLS OR GATES	L734 L3-02 DO YOU USE OR REFER TO UP-COUNTERS
L701 K1-07 DO YOU USE OR REFER TO TRUTH TABLES FOR OR LOGIC SYMBOLS OR GATES	L735 L3-03 DO YOU USE OR REFER TO DOWN-COUNTERS
L702 K1-08 DO YOU USE OR REFER TO TRUTH TABLES FOR AND OR OR LOGIC SYMBOLS WITH STATE INDICATORS	
L703 L1-09 DO YOU USE OR REFER TO TRUTH TABLES FOR EXCLUSIVE OR LOGIC SYMBOLS	
L704 L1-10 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR AND GATES	
L705 L1-11 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR OR GATES	
L706 L1-12 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR NAND OR NOR	

L736 L3-04 DO YOU USE OR REFER TO SERIAL COUNTERS	M765 M1-09 DO YOU USE OR REFER TO ELECTRICAL LENGTH OF SAWTOOTH WAVEFORMS
L737 L3-05 DO YOU USE OR REFER TO PARALLEL COUNTERS	M766 M1-10 DO YOU USE OR REFER TO PHYSICAL LENGTH OF SAWTOOTH WAVEFORMS
L738 L3-06 DO YOU USE OR REFER TO RING COUNTERS	M767 M1-11 DO YOU USE OR REFER TO LINEAR SLOPE OF SAWTOOTH WAVEFORMS
L739 L3-07 DO YOU USE OR REFER TO DECADE COUNTERS	M768 M1-12 DO YOU USE OR REFER TO GATE LENGTH OF SAWTOOTH WAVEFORMS
L740 L3-08 DO YOU USE OR REFER TO COUNT DETECT CIRCUITS	M769 M2-01 DO YOU USE SIGNAL GENERATORS IN YOUR PRESENT JOB
L741 L3-09 DO YOU USE OR REFER TO DOWN CLOCKS	M770 M2-02 DO YOU PERFORM OPERATIONAL CHECKS WHILE USING SIGNAL GENERATORS
L742 L3-10 DO YOU USE OR REFER TO UP CLOCKS	M771 M2-03 DO YOU PERFORM PERIODIC MAINTENANCE SUCH AS ADJUSTING, ALIGNING, OR CALIBRATING WHILE USING SIGNAL GENERATORS
L743 L3-11 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-COUNTERS HAVING COMPLEMENTED FLIP-FLOPS	M772 M2-04 DO YOU TROUBLESHOOT TO AN ASSEMBLY OR SUBASSEMBLY WHILE USING SIGNAL GENERATORS
L744 L3-12 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SERIAL UP- OR DOWN-COUNTERS HAVING COMPLEMENTING FLIP-FLOPS	M773 M2-05 DO YOU TROUBLESHOOT TO THE SMALLEST REPLACEABLE COMPONENT WHILE USING SIGNAL GENERATORS
L745 L3-13 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DECADE COUNTERS	M774 M2-06 DO YOU USE AUDIO SINE-WAVE GENERATORS
L746 L3-14 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF RING COUNTERS	M775 M2-07 DO YOU USE AUDIO NON-SINUSOIDAL WAVE GENERATORS SUCH AS SQUARE WAVE, TRIANGLE, PULSE, OR SPIKE
L747 L3-15 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SERIAL UP-COUNTERS FEEDING A PARALLEL STORAGE REGISTER	M776 M2-08 DO YOU USE RF GENERATORS LESS THAN 1,000 MH
L748 L3-16 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS	M777 M2-09 DO YOU USE RF GENERATORS GREATER THAN 1,000 MH
L749 L3-17 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF COUNTERS	M778 M2-10 DO YOU USE OTHER SPECIAL PURPOSE OR MULTI-FUNCTION GENERATORS
L750 L3-18 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR UP-COUNTERS HAVING COMPLEMENTED FLIP-FLOPS	M779 M3-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH ALTERNATING CURRENT OR DIRECT CURRENT MOTORS OR GENERATORS
L751 L3-19 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR SERIAL UP- OR DOWN-COUNTERS HAVING COMPLEMENTING FLIP-FLOPS	M780 M3-02 DO YOU INSPECT MOTORS
L752 L3-20 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR SERIAL UP-COUNTERS FEEDING A PARALLEL STORAGE REGISTER	M781 M3-03 DO YOU CLEAN OR LUBRICATE MOTORS
L753 L3-21 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR OTHER TYPES OF COUNTERS	M782 M3-04 DO YOU OPERATE MOTORS
L754 L3-22 DO YOU CONSTRUCT TRUTH TABLES FROM LOGIC DIAGRAMS OF DECADE COUNTERS	M783 M3-05 DO YOU REMOVE OR REPLACE COMPLETE MOTORS
L755 L3-23 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP IN RING COUNTERS FOR SPECIFIC INPUT PULSES	M784 M3-06 DO YOU REMOVE OR REPLACE MOTOR PARTS
L756 L3-24 DO YOU DETERMINE THE APPROPRIATE AND GATE NECESSARY IN COUNT DETECT CIRCUITS TO INDICATE A REQUIRED COUNT	M785 M3-07 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF MOTORS
M TIMING CIRCUITS, USE OF SIGNAL GENERATORS, MOTORS, AND GENERATORS	M786 M3-08 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF MOTORS
M757 M1-01 DO YOU WORK WITH SAWTOOTH WAVE GENERATORS	M787 M3-09 DO YOU PERFORM ANY TASKS ON FIELD COILS
M758 M1-02 DO YOU WORK WITH TRAPEZOIDAL WAVE GENERATORS	M788 M3-10 DO YOU PERFORM ANY TASKS ON ARMATURES
M759 M1-03 DO YOU WORK WITH PULSED OSCILLATORS WITH REGENERATIVE FEEDBACK	M789 M3-11 DO YOU PERFORM ANY TASKS ON ROTORS
M760 M1-04 DO YOU WORK WITH PULSED OSCILLATORS WITHOUT REGENERATIVE FEEDBACK	M790 M3-12 DO YOU PERFORM ANY TASKS ON BRUSHES
M761 M1-05 DO YOU WORK WITH BLOCKING OSCILLATORS	M791 M3-13 DO YOU PERFORM ANY TASKS ON SLIP RINGS
M762 M1-06 DO YOU USE OR REFER TO RISE TIME	M792 M3-14 DO YOU PERFORM ANY TASKS ON COMMUTATORS
M763 M1-07 DO YOU USE OR REFER TO FALL OR FLYBACK TIME	M793 M3-15 DO YOU PERFORM ANY TASKS ON POLE PIECES
M764 M1-08 DO YOU USE OR REFER TO SLEEP TIME	M794 M3-16 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OF THE FORCE OR TORQUE CREATED BY A MOTOR
	M795 M3-17 DO YOU DETERMINE OR MEASURE THE DIRECTION OF THE MECHANICAL FORCE OR TORQUE CREATED BY A MOTOR
	M796 M3-18 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OR DIRECTION OF THE INDUCED VOLTAGE IN MOTORS
	M797 M3-19 DO YOU WORK WITH SYNCHRONOUS MOTORS
	M798 M3-20 DO YOU WORK WITH INDUCTION MOTORS
	M799 M3-21 DO YOU WORK WITH SPLIT-PHASE MOTORS

MOTOR MOVEMENTS, SATURABLE REACTORS, MAGNETIC AMPLIFIERS, AND WAVESHAPING CIRCUITS	
N800 N3-22 DO YOU WORK WITH SOME COMBINATION OF THE ABOVE MOTORS	
N801 N3-23 DO YOU INSPECT GENERATORS	
N802 N3-24 DO YOU CLEAN OR LUBRICATE GENERATORS	
N803 N3-25 DO YOU OPERATE GENERATORS	
N804 N3-26 DO YOU REMOVE OR REPLACE COMPLETE GENERATORS	
N805 N3-27 DO YOU REMOVE OR REPLACE GENERATOR PARTS	
N806 N3-28 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF GENERATORS	
N807 N3-29 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF GENERATORS	
JOB	
N808 N3-01 DO YOU WORK WITH METERS IN YOUR PRESENT JOB	
N809 N3-02 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF PERMANENT MAGNETS	
N810 N3-03 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF MOVING COILS	
N811 N3-04 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF SPIRAL SPRINGS	
N812 N3-05 DO YOU READ METER SCALES	
N813 N3-06 DO YOU EXTEND THE RANGE OF AMMETERS	
N814 N3-07 DO YOU ZERO OHMMETERS	
N815 N3-08 DO YOU ZERO OHMMETERS	
N816 N3-09 DO YOU EXTEND THE RANGE OF VOLTMETERS	
N817 N3-10 DO YOU USE OR REFER TO VOLTMETER SENSITIVITY (EXPRESSED IN UNITS OF OHMS PER VOLT)	
N818 N3-01 DO YOU WORK WITH SATURABLE REACTORS OR MAGNETIC AMPLIFIERS IN YOUR PRESENT JOB	
N819 N3-02 DO YOU INSPECT MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	
N820 N3-03 DO YOU CLEAN MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	
N821 N3-04 DO YOU ADJUST MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	
N822 N3-05 DO YOU TROUBLESHOOT MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	
N823 N3-06 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	
N824 N3-07 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIER OR SATURABLE REACTOR COMPONENTS	
N825 N3-08 DO YOU USE OR REFER TO HYSTERESIS CURVES OR LOOPS	
N826 N3-09 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SINGLE WINDING SATURABLE REACTORS	
N827 N3-10 DO YOU MEASURE OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SINGLE WINDING SATURABLE REACTORS	
N828 N3-11 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS FOR MAGNETIC AMPLIFIERS	
N829 N3-12 DO YOU USE OR REFER TO COERCIVE FORCE IN SATURABLE REACTORS	
N830 N3-13 DO YOU USE OR REFER TO RESIDUAL MAGNETISM IN SATURABLE REACTORS	
N831 N3-14 DO YOU USE OR REFER TO FLUX DENSITY IN SATURABLE REACTORS	
N832 N3-15 DO YOU USE OR REFER TO POINT OF SATURATION IN SATURABLE REACTORS	
N833 N3-16 DO YOU USE OR REFER TO SATURABLE REACTOR SCHEMATIC SYMBOLS	
N834 N3-01 DO YOU WORK WITH WAVESHAPING CIRCUITS IN YOUR PRESENT JOB	
N835 N3-02 DO YOU USE OR REFER TO TRANSIENT INTERVALS	
N836 N3-03 DO YOU USE OR REFER TO PULSE WIDTH (PW)	
N837 N3-04 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)	
N838 N3-05 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)	
N839 N3-06 DO YOU USE OR REFER TO DIFFERENTIATING CIRCUITS	
N840 N3-07 DO YOU USE OR REFER TO INTEGRATING CIRCUITS	
N841 N3-08 DO YOU USE OR REFER TO THE CLASSIFICATION OF TIME CONSTANTS (TC) AS LONG, MEDIUM, OR SHORT	
N842 N3-09 DO YOU DETERMINE WHETHER AN LR OR RC CIRCUIT IS DIFFERENTIATING OR INTEGRATING BASED ON THE TIME CONSTANT AND OUTPUT CONFIGURATION	
N843 N3-10 DO YOU WORK WITH SQUARE WAVE GENERATORS	
N844 N3-11 DO YOU WORK WITH RECTANGULAR WAVE GENERATORS	
0 SINGLE SIDEBAND SYSTEMS, PULSE MODULATION SYSTEMS, AND ANTENNAS	
N845 N3-01 DO YOU WORK ON SINGLE SIDEBAND SYSTEMS IN YOUR PRESENT JOB	
N846 N3-02 DO YOU INSPECT SSB TRANSMIT OR RECEIVE SYSTEMS	
N847 N3-03 DO YOU CLEAN SSB TRANSMIT OR RECEIVE SYSTEMS	
N848 N3-04 DO YOU ALIGN SSB TRANSMIT OR RECEIVE SYSTEMS	
N849 N3-05 DO YOU TROUBLESHOOT TO SSB TRANSMIT OR RECEIVE SYSTEMS	
N850 N3-06 DO YOU TROUBLESHOOT TO SSB TRANSMIT OR RECEIVE SYSTEMS	
N851 N3-07 DO YOU REMOVE OR REPLACE SSB TRANSMIT OR RECEIVE SYSTEMS	
N852 N3-08 DO YOU REMOVE OR REPLACE SSB TRANSMIT OR RECEIVE COMPONENTS	
N853 N3-09 DO YOU PERFORM TASKS ON SSB AUDIO AMPLIFIERS	
N854 N3-10 DO YOU PERFORM TASKS ON SSB BALANCED MODULATORS	
N855 N3-11 DO YOU PERFORM TASKS ON SSB CARRIER OSCILLATORS	
N856 N3-12 DO YOU PERFORM TASKS ON SSB LC FILTERS	
N857 N3-13 DO YOU PERFORM TASKS ON SSB CRYSTAL FILTERS	
N858 N3-14 DO YOU PERFORM TASKS ON SSB MECHANICAL FILTERS	
N859 N3-15 DO YOU PERFORM TASKS ON SSB OSCILLATORS	
N860 N3-16 DO YOU PERFORM TASKS ON SSB MIXERS	
N861 N3-17 DO YOU PERFORM TASKS ON SSB DRIVERS	
N862 N3-18 DO YOU PERFORM TASKS ON SSB POWER AMPLIFIERS	

0863 01-19 DO YOU PERFORM TASKS ON SSB RF AMPLIFIERS	0896 02-22 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM RF AMPLIFIERS
0864 01-20 DO YOU PERFORM TASKS ON SSB FREQUENCY CONVERTERS	0897 02-23 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM FREQUENCY CONVERTERS
0865 01-21 DO YOU PERFORM TASKS ON SSB IF AMPLIFIERS	0898 02-24 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM IF AMPLIFIERS
0866 01-22 DO YOU PERFORM TASKS ON SSB DEMODULATORS	0899 02-25 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM DETECTORS
0867 01-23 DO YOU PERFORM TASKS ON SSB DEMODULATORS	0900 02-26 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM VIDEO AMPLIFIERS
0868 01-24 DO YOU USE OR REFER TO SELECTIVE FADING	0901 02-27 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER VIDEO AMPLIFIERS
0869 01-25 DO YOU USE OR REFER TO PEAK POWER	0902 02-28 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM DON'T REMEMBER WHICH PULSE MODULATION SYSTEM STAGES
0870 01-26 DO YOU USE OR REFER TO FREQUENCY STABILITY	0903 02-29 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)
0871 01-27 DO YOU USE OR REFER TO RESPONSE CURVES FOR BANDWIDTH FILTERS	0904 02-30 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)
0872 01-28 DO YOU CALCULATE PEAK POWER OR EFFECTIVE POWER OF SSB TRANSMITTERS	0905 02-31 DO YOU USE OR REFER TO PULSE WIDTH (PW)
0873 01-29 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB TRANSMITTER SCHEMATIC DIAGRAMS	0906 02-32 DO YOU USE OR REFER TO PULSE SHAPE
0874 01-30 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB RECEIVER SCHEMATIC DIAGRAMS	0907 02-33 DO YOU USE OR REFER TO PEAK POWER
0875 02-01 DO YOU WORK ON PULSE MODULATION SYSTEMS IN YOUR PRESENT JOB	0908 02-34 DO YOU USE OR REFER TO AVERAGE POWER
0876 02-02 DO YOU INSPECT PULSE MODULATION SYSTEMS	0909 02-35 DO YOU CALCULATE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)
0877 02-03 DO YOU CLEAN PULSE MODULATION SYSTEMS	0910 02-36 DO YOU MEASURE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)
0878 02-04 DO YOU ALIGN PULSE MODULATION SYSTEMS	0911 02-37 DO YOU USE FORMULAS TO CALCULATE AVERAGE POWER OR PEAK POWER OF PULSE MODULATION TRANSMIT SYSTEMS
0879 02-05 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEMS	0912 02-38 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION TRANSMITTER SCHEMATIC DIAGRAMS
0880 02-06 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEM COMPONENTS	0913 02-39 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION RECEIVER SCHEMATIC DIAGRAMS
0881 02-07 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEMS	0914 03-01 DO YOU WORK WITH ANTENNAS IN YOUR PRESENT JOB
0882 02-08 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEM COMPONENTS	0915 03-02 DO YOU INSPECT ANTENNAS
0883 02-09 DO YOU WORK ON PULSE-AMPLITUDE MODULATION (PAM) SYSTEMS	0916 03-03 DO YOU CLEAN ANTENNAS
0884 02-10 DO YOU WORK ON PULSE-DURATION MODULATION (PDM) SYSTEMS	0917 03-04 DO YOU PHYSICALLY ALIGN ANTENNAS
0885 02-11 DO YOU WORK ON PULSE-POSITION MODULATION (PPM) SYSTEMS	0918 03-05 DO YOU ELECTRICALLY ALIGN ANTENNAS
0886 02-12 DO YOU WORK ON PULSE-CODE MODULATION (PCM) SYSTEMS	0919 03-06 DO YOU TROUBLESHOOT TO ANTENNAS
0887 02-13 DO YOU WORK ON LINE PULSING MODULATION SYSTEMS	0920 03-07 DO YOU TROUBLESHOOT TO ANTENNA COMPONENTS
0888 02-14 DO YOU WORK ON DON'T REMEMBER WHICH TYPE OF MODULATION SYSTEM	0921 03-08 DO YOU REMOVE OR INSTALL ANTENNAS
0889 02-15 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER SUPPLIES	0922 03-09 DO YOU REMOVE OR REPLACE COMPONENTS OF ANTENNAS
0890 02-16 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM CHARGING CHOKES AND CHARGING DIODES	0923 03-10 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF E OR ELECTRIC FIELD LINES
0891 02-17 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE FORMING NETWORKS	0924 03-11 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF H OR MAGNETIC FIELD LINES
0892 02-18 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TIMERS	0925 03-12 DO YOU DETERMINE THE DIRECTION OF THE MAGNETIC LINES IN RELATION TO THE ELECTRIC LINES OF FORCE FOR ANTENNAS
0893 02-19 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM SWITCHES SUCH AS GAS THYRATONS	0926 03-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE OF CORRECT LENGTH (HALF-WAVE) ACT AS INDUCTIVE LOADS TO THE GENERATOR
0894 02-20 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE TRANSFORMERS	0927 03-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE LONGER THAN A HALF-WAVE ACT AS INDUCTIVE LOADS TO THE GENERATOR
0895 02-21 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TRANSMITTER TUBES	

0920 03-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE SHORTER THAN A HALF-WAVE ACT AS CAPACITIVE LOADS TO THE GENERATOR	P955	TRANSMISSION LINES P1-03 DO YOU REFER TO OR USE SKIN EFFECTS OF HIGH FREQUENCY CURRENTS IN TRANSMISSION LINES
0929 03-16 DO YOU WORK WITH HERTZ ANTENNAS	P956	P1-04 DO YOU REFER TO OR USE RADIATION LOSS IN TRANSMISSION LINES
0930 03-17 DO YOU WORK WITH MARCONI ANTENNAS	P957	P1-05 DO YOU USE OR REFER TO DIELECTRIC LOSS IN TRANSMISSION LINES
0931 03-18 DO YOU WORK WITH BROADSIDE ARRAYS	P958	P1-06 DO YOU USE OR REFER TO LEAKAGE LOSSES IN TRANSMISSION LINES
0932 03-19 DO YOU WORK WITH END-FIRE ARRAYS	P959	P1-07 DO YOU WORK WITH TWISTED PAIR TRANSMISSION LINES
0933 03-20 DO YOU WORK WITH CARDIOID ARRAYS	P960	P1-08 DO YOU WORK WITH TWIN LEAD TRANSMISSION LINES
0934 03-21 DO YOU WORK WITH COLLINER ARRAYS	P961	P1-09 DO YOU WORK WITH OPEN TWO-WIRE TRANSMISSION LINES
0935 03-22 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC INDUCTION FIELDS WHEN WORKING WITH ANTENNAS	P962	P1-10 DO YOU WORK WITH FLEXIBLE COAXIAL CABLE TRANSMISSION LINES
0936 03-23 DO YOU MEASURE ELECTROMAGNETIC INDUCTION FIELDS OF ANTENNAS	P963	P1-11 DO YOU WORK WITH RIGID COAXIAL CABLE TRANSMISSION LINES
0937 03-24 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC RADIATION FIELDS WHEN WORKING WITH ANTENNAS	P964	P1-12 DO YOU TROUBLESHOOT TRANSMISSION LINES
0938 03-25 DO YOU MEASURE ELECTROMAGNETIC RADIATION FIELDS OF ANTENNAS	P965	P1-13 DO YOU ANALYZE VOLTAGE OR CURRENT WAVEFORMS IN TRANSMISSION LINES TO DETERMINE THE TYPE OF TERMINATION (OPEN, SHORTED, CAPACITIVE, INDUCTIVE)
0939 03-26 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA RADIATION	P966	P1-14 DO YOU SELECT APPROPRIATE TRANSMISSION LINES TERMINATIONS TO ACHIEVE DESIRED WAVEFORMS
0940 03-27 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA INDUCTION FIELD	P967	P1-15 DO YOU USE OR REFER TO SCHEMATIC SYMBOLS FOR LINE TERMINATIONS IN TERMS OF CIRCUIT TERMINATIONS
0941 03-28 ARE ANY OF THE ANTENNAS YOU WORK ON LINEARLY POLARIZED	P968	P1-16 DO YOU MEASURE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES
0942 03-29 ARE ANY OF THE ANTENNAS YOU WORK ON CIRCULARLY POLARIZED	P969	P1-17 DO YOU CALCULATE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES
0943 03-30 DO YOU MEASURE OR DETERMINE THE POLARITY OF ANTENNAS YOU WORK ON	P970	P1-18 DO YOU PERFORM THE CALCULATIONS NECESSARY TO DETERMINE THE IMPEDANCE AND LENGTH OF QUARTER - WAVELENGTH MATCHING TRANSFORMERS TO MATCH TRANSMISSION LINES TO LOADS
0944 03-31 DO YOU CONSTRUCT, OR MAKE THE CALCULATIONS NECESSARY TO CONSTRUCT, ANTENNAS OF CORRECT LENGTH FOR SPECIFIC WAVELENGTHS	P971	P1-19 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING MATCHING TRANSFORMERS
0945 03-32 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS	P972	P1-20 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING DELTA MATCHING
0946 03-33 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS DIRECTORS	P973	P1-21 DO YOU SELECT THE TYPE OF TRANSMISSION LINE NEEDED FOR PARTICULAR JOBS WITHOUT REFERRING TO TECHNICAL DATA
0947 03-34 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS REFLECTORS	P974	P1-22 DO YOU USE OR REFER TO THE TERM CHARACTERISTIC IMPEDANCE (Z0) OF TRANSMISSION LINES
0948 03-35 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN DON'T REMEMBER WHAT KIND OF ELEMENTS	P975	P1-23 DO YOU CALCULATE THE CHARACTERISTIC IMPEDANCE (Z0) OF TRANSMISSION LINES
0949 03-36 DO YOU WORK ON UNIDIRECTIONAL ANTENNAS	P976	P1-24 DO YOU USE OR REFER TO THE TERM CUTOFF FREQUENCY OF TRANSMISSION LINES
0850 03-37 DO YOU WORK ON BIDIRECTIONAL ANTENNAS	P977	P1-25 DO YOU USE OR REFER TO THE TERM VELOCITY FACTOR (K) OF TRANSMISSION LINES
0851 03-38 DO YOU WORK ON DON'T REMEMBER THE DIRECTIONALITY	P978	P1-26 DO YOU COMPUTE THE ELECTRICAL LENGTH OF TRANSMISSION LINES FOR PARTICULAR FREQUENCIES
0852 03-39 DO YOU WORK WITH ROTAR ANTENNA ARRAYS	P979	P1-27 DO YOU CONSTRUCT TRANSMISSION LINES OF PARTICULAR ELECTRICAL LENGTH FOR GIVEN FREQUENCIES
P TRANSMISSION LINES, WAVEGUIDES AND CAVITY RESONATORS, AND MICROWAVE AMPLIFIERS AND OSCILLATORS	P980	P1-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT AS THE FREQUENCY INCREASES AND THE PHYSICAL LENGTH OF TRANSMISSION LINES REMAIN CONSTANT, THE ELECTRICAL LENGTH
P954 P1-02 DO YOU REFER TO OR USE COPPER LOSS OR IZR LOSS IN		

P981 P1-29 DO YOU WORK WITH NONRESONANT (FLAT), TRANSMISSION LINES	INCREASES	P016 P2-33 DO YOU MEASURE THE TIME PHASE OF "E" OR "H" LINES IN WAVEGUIDES	"H" LINES IN WAVEGUIDES
P982 P1-30 DO YOU WORK WITH RESONANT TRANSMISSION LINES	LINES	P017 P2-34 DO YOU USE OR REFER TO THE SPACE QUADRATURE OF "E" OR "H" LINES IN WAVEGUIDES	WAVEGUIDES
P983 P1-31 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING STUB MATCHING		P018 P2-35 ARE HIGH POWER PROBES USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	"H" LINES IN WAVEGUIDES
P984 P2-01 DO YOU WORK WITH WAVEGUIDES OR CAVITY RESONATORS IN YOUR PRESENT JOB		P019 P2-36 ARE LOW POWER PROBES USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	RESONATORS YOU WORK WITH
P985 P2-02 DO YOU INSPECT WAVEGUIDES OR CAVITY RESONATORS		P020 P2-37 ARE LOOPS USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	RESONATORS YOU WORK WITH
P986 P2-03 DO YOU CLEAN WAVEGUIDES OR CAVITY RESONATORS		P021 P2-38 ARE APERTURES (WINDOWS OR IRISES) USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	YOU WORK WITH
P987 P2-04 DO YOU BEND WAVEGUIDES OR CAVITY RESONATORS		P022 P2-39 ARE DON'T REMEMBER THE KIND OF ENERGY COUPLING USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	OR CAVITY RESONATORS (WINDOWS OR IRISES) USED ON WAVEGUIDES
P988 P2-05 DO YOU TWIST WAVEGUIDES OR CAVITY RESONATORS		P023 P2-40 DO YOU DETERMINE WHERE PROBES SHOULD BE MOUNTED IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO TECHNICAL DATA	ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH
P989 P2-06 DO YOU PRESSURIZE WAVEGUIDES OR CAVITY RESONATORS		P024 P2-41 DO YOU DETERMINE THE POSITIONING OF LOOPS IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO TECHNICAL DATA	WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO TECHNICAL DATA
P990 P2-07 DO YOU PURGE WAVEGUIDES OR CAVITY RESONATORS		P025 P2-42 DO YOU DETERMINE THE POSITIONING OR SIZE OF APERTURES IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO TECHNICAL DATA	WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO TECHNICAL DATA
P991 P2-08 DO YOU TROUBLESHOOT WAVEGUIDES OR CAVITY RESONATORS		P026 P2-43 ARE CHOKE JOINTS USED IN WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO TECHNICAL DATA
P992 P2-09 DO YOU REMOVE OR INSTALL COMPLETE WAVEGUIDE SECTIONS		P027 P2-44 ARE ROTATING JOINTS USED IN WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	RESONATORS YOU WORK WITH
P993 P2-10 DO YOU REMOVE OR INSTALL WAVEGUIDE SECTIONS		P028 P2-45 ARE DON'T REMEMBER THE KIND OF JOINTS USED IN WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	RESONATORS YOU WORK WITH
P994 P2-11 DO YOU REMOVE OR INSTALL DUMMY LOADS		P029 P2-46 DO YOU TUNE CAVITY RESONATORS USING CAPACITIVE TUNING	WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH
P995 P2-12 DO YOU REMOVE OR INSTALL E BENDS		P030 P2-47 DO YOU TUNE CAVITY RESONATORS USING INDUCTIVE TUNING	WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH
P996 P2-13 DO YOU REMOVE OR INSTALL H BENDS		P031 P2-48 DO YOU TUNE CAVITY RESONATORS USING VOLUME TUNING	WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH
P997 P2-14 DO YOU REMOVE OR INSTALL OTHER BENDS		P032 P2-49 DO YOU TUNE CAVITY RESONATORS USING DON'T REMEMBER THE METHOD OF TUNING	WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH
P998 P2-15 DO YOU REMOVE OR INSTALL CHOKE JOINTS		P033 P2-50 DO YOU MEASURE THE FREQUENCY OF SIGNALS IN CAVITY RESONATORS	THE METHOD OF TUNING
P999 P2-16 DO YOU REMOVE OR INSTALL ROTATING JOINTS		P034 P3-01 IN YOUR PRESENT JOB DO YOU WORK WITH KLYSTRONS, TRAVELING WAVE TUBES (TWT), PARAMETRIC AMPLIFIERS, OR MAGNETRONS	RESONATORS
P000 P2-17 DO YOU REMOVE OR INSTALL DIRECTIONAL COUPLERS		P035 P3-02 DO YOU USE OR REFER TO INTERELECTRODE CAPACITANCE	TRAVELING WAVE TUBES (TWT), PARAMETRIC AMPLIFIERS, OR MAGNETRONS
P001 P2-18 DO YOU REMOVE OR INSTALL BIDIRECTIONAL COUPLERS		P036 P3-03 DO YOU USE OR REFER TO ELECTRON TRANSIT TIME	RESONATORS
P002 P2-19 DO YOU USE OR REFER TO "A" WALL OF WAVEGUIDES		P037 P3-04 DO YOU USE OR REFER TO LEAD INDUCTANCE	IN YOUR PRESENT JOB DO YOU WORK WITH KLYSTRONS, TRAVELING WAVE TUBES (TWT), PARAMETRIC AMPLIFIERS, OR MAGNETRONS
P003 P2-20 DO YOU USE OR REFER TO "B" WALL OF WAVEGUIDES		P038 P3-05 DO YOU USE OR REFER TO RF LOSSES IN EXTERNAL CIRCUITRY	DO YOU USE OR REFER TO INTERELECTRODE CAPACITANCE
P004 P2-21 DO YOU USE OR REFER TO CUTOFF FREQUENCY OF WAVEGUIDES		P039 P3-06 DO YOU USE OR REFER TO PRINCIPLE OF ELECTRON VELOCITY MODULATION	DO YOU USE OR REFER TO ELECTRON TRANSIT TIME
P005 P2-22 DO YOU USE OR REFER TO FREQUENCY-DETERMINING WALL OF WAVEGUIDES		P040 P3-07 DO YOU USE OR REFER TO ELECTRON BUNCHING	DO YOU USE OR REFER TO LEAD INDUCTANCE
P006 P2-23 DO YOU USE OR REFER TO POWER-DETERMINING WALL OF WAVEGUIDES		P041 P3-08 DO YOU WORK WITH TWO-CAVITY KLYSTRONS	DO YOU USE OR REFER TO RF LOSSES IN EXTERNAL CIRCUITRY
P007 P2-24 DO YOU USE OR REFER TO ELECTRIC FIELD BOUNDARY CONDITIONS		P042 P3-09 DO YOU WORK WITH THREE-CAVITY KLYSTRONS	DO YOU WORK WITH TWO-CAVITY KLYSTRONS
P008 P2-25 DO YOU USE OR REFER TO MAGNETIC FIELD BOUNDARY CONDITIONS		P043 P3-10 DO YOU WORK WITH REFLEX KLYSTRONS	DO YOU WORK WITH THREE-CAVITY KLYSTRONS
P009 P2-26 DO YOU USE OR REFER TO DUPLEXER FIELD BOUNDARY CONDITIONS		P044 P3-11 DO YOU WORK WITH TRAVELING-WAVE TUBES (TWT)	DO YOU WORK WITH REFLEX KLYSTRONS
P010 P2-27 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST WAVEGUIDES ARE MADE WITH A "B" WALL SIZE OF .7 WAVELENGTHS			DO YOU WORK WITH TRAVELING-WAVE TUBES (TWT)
P011 P2-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST "A" WALLS RANGE FROM .2 TO .5 WAVELENGTHS IN SIZE, WITH .35 USED AS AN AVERAGE			
P012 P2-29 ARE YOU CONCERNED WITH THE MATERIAL (SUCH AS BRASS) WHICH WAVEGUIDES ARE MADE OF			
P013 P2-30 DO YOU COMPUTE THE LENGTH OF A WAVEGUIDE FOR SPECIFIC INSTALLATION			
P014 P2-31 DO YOU USE THE RIGHT HAND RULE TO DETERMINE THE DIRECTION OF PROPAGATION, DIRECTION OF "E" FIELD, OR DIRECTION OF "H" FIELD IN WAVEGUIDES			
P015 P2-32 DO YOU USE OR REFER TO THE TIME PHASE OF PEAK "E" OR			

P045 P3-12 DO YOU WORK WITH NONDEGENERATIVE PARAMETRIC AMPLIFIERS	P082 P3-49 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON GRIDS
P046 P3-13 DO YOU WORK WITH UP-CONVERTER PARAMETRIC AMPLIFIERS	P083 P3-50 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON GRID CAVITY GAPS
P047 P3-14 DO YOU WORK WITH MAGNETRONS	P084 P3-51 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON RESONANT CAVITIES
P048 P3-15 DO YOU INSPECT KLYSTRONS OR TWT	P085 P3-52 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON MAGNETIC COUPLING LOOPS
P049 P3-16 DO YOU CLEAN KLYSTRONS OR TWT	P086 P3-53 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON FILAMENTS
P050 P3-17 DO YOU TUNE KLYSTRONS OR TWT ELECTRICALLY	P087 P3-54 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON CATHODES
P051 P3-18 DO YOU TUNE KLYSTRONS OR TWT MECHANICALLY	P088 P3-55 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON OUTPUT LEADS
P052 P3-19 DO YOU PERFORM OPERATIONAL CHECKS OF KLYSTRONS OR TWT	P089 P3-56 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELLING-WAVE TUBES FILAMENTS
P053 P3-20 DO YOU TROUBLESHOOT KLYSTRONS OR TWT	P090 P3-57 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELLING-WAVE TUBES CATHODES
P054 P3-21 DO YOU REMOVE OR REPLACE COMPLETE KLYSTRON OR TWT	P091 P3-58 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELLING-WAVE TUBES MODULATOR GRIDS
P055 P3-22 DO YOU REMOVE OR REPLACE KLYSTRON OR TWT COMPONENTS	P092 P3-59 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELLING-WAVE TUBES ANODES
P056 P3-23 DO YOU INSPECT PARAMETRIC AMPLIFIERS	P093 P3-60 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELLING-WAVE TUBES MELICES
P057 P3-24 DO YOU CLEAN PARAMETRIC AMPLIFIERS	P094 P3-61 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELLING-WAVE TUBES COLLECTORS
P058 P3-25 DO YOU ADJUST PARAMETRIC AMPLIFIERS	P095 P3-62 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELLING-WAVE TUBES MAGNETS
P059 P3-26 DO YOU TUNE PARAMETRIC AMPLIFIERS	P096 P3-63 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELLING-WAVE TUBES ATTENUATORS
P060 P3-27 DO YOU PERFORM OPERATIONAL CHECKS OF PARAMETRIC AMPLIFIERS	P097 P3-64 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER FERRITE CIRCULATORS
P061 P3-28 DO YOU TROUBLESHOOT PARAMETRIC AMPLIFIERS	P098 P3-65 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER SIGNAL CAVITIES
P062 P3-29 DO YOU REMOVE OR REPLACE COMPLETE PARAMETRIC AMPLIFIER	P099 P3-66 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER IDLER CAVITIES
P063 P3-30 DO YOU REMOVE OR REPLACE PARAMETRIC AMPLIFIER COMPONENTS	P100 P3-67 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER VARACTOR DIODES
P064 P3-31 DO YOU INSPECT MAGNETRONS	P101 P3-68 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER FERRITE ISOLATORS
P065 P3-32 DO YOU CLEAN MAGNETRONS	P102 P3-69 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER REVERSE-BIAS BATTERIES
P066 P3-33 DO YOU ADJUST MAGNETRONS	P103 P3-70 DO YOU PERFORM TASKS ON ANODES
P067 P3-34 DO YOU TUNE MAGNETRONS	P104 P3-71 DO YOU PERFORM TASKS ON ANODE COOLING PINS
P068 P3-35 DO YOU PERFORM OPERATIONAL CHECKS OF MAGNETRONS	P105 P3-72 DO YOU PERFORM TASKS ON COUPLING LOOPS
P069 P3-36 DO YOU TROUBLESHOOT MAGNETRONS	P106 P3-73 DO YOU PERFORM TASKS ON HEATER LEADS
P070 P3-37 DO YOU REMOVE OR REPLACE COMPLETE MAGNETRON	P107 P3-74 DO YOU PERFORM TASKS ON RESONANT CAVITIES
P071 P3-38 DO YOU REMOVE OR REPLACE MAGNETRON COMPONENTS	P108 P3-75 DO YOU PERFORM TASKS ON CATHODES
P072 P3-39 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS COLLECTOR PLATES	P109 P3-76 DO YOU PERFORM TASKS ON MAGNETS
P073 P3-40 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATCHER CAVITIES	
P074 P3-41 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATCHER GRIDS	
P075 P3-42 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS FEEDBACK LOOPS	
P076 P3-43 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS DRIFT SPACES	
P077 P3-44 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS BUNCHER GRIDS	
P078 P3-45 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS BUNCHER CAVITIES	
P079 P3-46 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CONTROL GRIDS	
P080 P3-47 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATHODES	
P081 P3-48 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON REFLECTOR (REFLECTOR) PLATES	

REGISTERS, STORAGE DEVICES, AND DIGITAL TO ANALOG CONVERTERS

Q110 Q1-01 DO YOU USE OR REFER TO STORAGE REGISTERS		Q137 Q3-12 DO YOU USE OR REFER TO COMPARE FUNCTION OF A/D CONVERTERS
Q111 Q1-02 DO YOU USE OR REFER TO SHIFT REGISTERS		Q138 Q3-13 DO YOU USE OR REFER TO DIGITAL FUNCTION OF A/D CONVERTERS
Q112 Q1-03 DO YOU USE OR REFER TO LOGIC SYMBOLS OF SHIFT REGISTERS		Q139 Q3-14 DO YOU PERFORM ANY TASKS ON MECHANICAL ANALOG-TO-DIGITAL (A/D) CONVERTERS
Q113 Q1-04 DO YOU USE OR REFER TO LOGIC SYMBOLS OF STORAGE REGISTERS		
Q114 Q1-05 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS	R	PHANTASTRONS, SCHMITT TRIGGERS, AND CABLE FABRICATION
Q115 Q1-06 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF REGISTERS		
Q116 Q1-07 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP OF A SHIFT REGISTER AFTER A SPECIFIED NUMBER OF SHIFT PULSES HAVE PASSED	R190 R1-01 DO YOU WORK WITH PHANTASTRON CIRCUITRY IN YOUR PRESENT JOB	
Q117 Q2-01 DO YOU WORK WITH DIGITAL COUNTERS, REGISTERS, OR STORAGE DEVICES IN YOUR PRESENT JOB	R191 R2-01 IN YOUR PRESENT JOB DO YOU WORK WITH SCHMITT TRIGGER CIRCUITS	
Q118 Q2-02 DO YOU USE OR REFER TO DELAY LINES	R192 R2-02 DO YOU TRACE DATA FLOW THROUGH SCHMITT TRIGGER SCHEMATIC DIAGRAMS	
Q119 Q2-03 DO YOU USE OR REFER TO MAGNETIC CORES	R193 R2-03 DO YOU USE OR REFER TO SCHMITT TRIGGER LOGIC SYMBOLS	
Q120 Q2-04 DO YOU USE OR REFER TO MAGNETIC DRUMS	R194 R3-01 IN YOUR PRESENT JOB DO YOU FABRICATE MULTICONDUCTOR CABLES	
Q121 Q2-05 DO YOU USE OR REFER TO MAGNETIC TAPES		
Q122 Q2-06 DO YOU USE OR REFER TO ACCESS TIME OR SPEED OR MEMORY SYSTEMS	R195 R3-02 DO YOU FABRICATE COAXIAL CABLES	
Q123 Q2-07 DO YOU USE OR REFER TO WORD CAPACITY OF MEMORY SYSTEMS	S	INPUT/OUTPUT DEVICES, PHOTO SENSITIVE DEVICES, AND SYNCHRONOUS VIBRATIONS
Q124 Q2-08 DO YOU USE OR REFER TO VOLATILITY OF MEMORY SYSTEMS		
Q125 Q2-09 DO YOU USE OR REFER TO LOGIC SYMBOL OF DELAY LINES	S196 S1-01 IN YOUR PRESENT JOB DO YOU PERFORM ANY TASKS ON VISUAL READOUT SYSTEMS	
Q126 Q3-01 IN YOUR PRESENT JOB, DO YOU WORK WITH DIGITAL-TO-ANALOG (D/A) CONVERTERS, ANALOG-TO-DIGITAL (A/D) CONVERTERS, OR BINARY-TO-DECIMAL READOUT CONVERTERS	S197 S1-02 DO YOU PERFORM ANY TASKS ON NIXIE LIGHTS OR NIXIE LIGHT DECODER SYSTEMS	
Q127 Q3-02 DO YOU COMPUTE OUTPUT VOLTAGES FOR ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS FOR GIVEN INPUT VOLTAGES	S198 S1-03 DO YOU ANALYZE NIXIE LIGHT DECODER SYSTEMS USING BOOLEAN ALGEBRA	
Q128 Q3-03 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE COUNT IN ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS IS DETERMINED BY ADDING THE DENOMINATORS OF THE RESISTORS	S199 S2-01 DO YOU WORK WITH PHOTO TUBES IN YOUR PRESENT JOB	
Q129 Q3-04 DO YOU COMPUTE ANALOG VOLTAGES FOR GIVEN BINARY COUNTS IN ELECTRONIC DIGITAL-TO-ANALOG (D/A) CONVERTERS	S150 S3-01 IN YOUR PRESENT JOB DO YOU WORK WITH CHOPPER CIRCUITS	
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DECIBELS
U258 U2-04 DUMMY TASK TO IDENTIFY INCUMBENTS WHO PERFORMED
NO TASKS

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Performs maintenance on missile and Remotely Piloted Vehicle (RPV) guidance and control systems, subsystems, and components; operates, calibrates, and maintains related test, monitoring, and checkout equipment; performs malfunction analysis, and repairs, maintains, modifies, inspects, and services missile and RPV systems, subsystems, and ground operating equipment to component level; performs field maintenance on electronic test, launch control, checkout, and related ground support equipment used by missile activities, and assembles and disassembles missiles and RPVs.

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